POSSIBLE INTERFERENCE

DATE: 2/17/06

TO: BERNHARDT, EMILY, TSANG, CECILIA, WILSON, JAMES

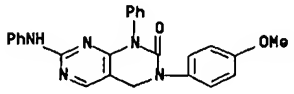
CC: TRUONG, TAMTHOM AND WARD, PAUL

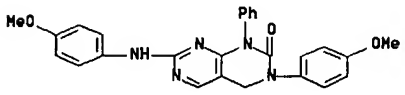
FROM: MCKENZIE, THOMAS C. TCM

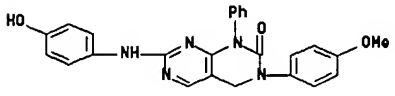
RE: 09/623,737, 10/623,972, 10/638,848, & 10/817,697

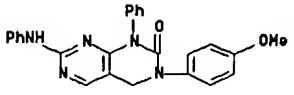
The four cases of concern are 09/623,737 and 10/638,848 both of which are assigned to Examiner Truong, 10/623,972, which is assigned to Examiner Ward, and 10/817,697, which is assigned to me. None of the four applications has issued as a patent although, 10/623,972 and 10/817,697 have been allowed. The claims of 10/623,972 and 10/817,697 are patentably distinct because of differing limitations in radical R^1, the substituent at position 1 of the pyrimidino[4,5-d]pyrimidine ring.

There are no overlapping species among the four cases. There are 53 pyrimidino[4,5-d]pyrimidine species in the two 09/623,737 and 10/638,848 cases. There are 41 pyrimidino[4,5-d]pyrimidine species in the 10/623,972 case. There are 79 pyrimidino[4,5-d]pyrimidine species in the 10/817,697 case. All of the species in the 09/623,737 and 10/638,848 cases either have methyl, ethyl, isopropyl, or cyclopentyl as the substituent at position 1 of the pyrimidino[4,5-d]pyrimidine ring. Thus, none of the species of 09/623,737 and 10/638,848 cases meet the claim limitations of 10/623,972 case, which requires C_6H_5 at this position. None of the species found in the 10/623,972 case fit the claim limitations of 10/638,848 because the closest four species pictured below, have a methoxy group on R^3, not permitted by the claim limitations in 10/638,848.

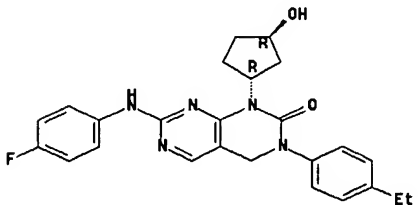


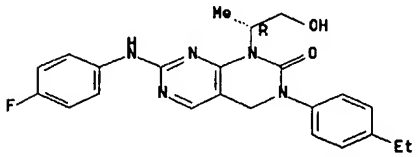






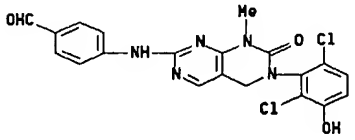
There are two species found in the 10/817,697 case which fit the claim limitations of the 10/638,848 case and which are shown below. The first compound pictured below fits the limitations

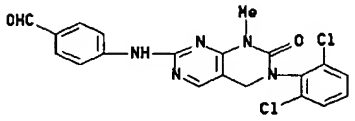


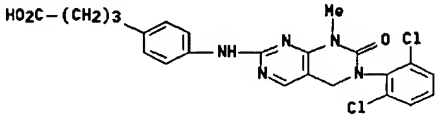


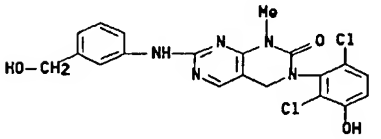
of claim 1 of 10/638,848 with $R^1 = (CH_2)_n$-Ar = 4-fluorophenyl, n = 0, R^2 = cyclopentyl substituted by OH, and $R^3 = (CH_2)_n$-Ar = 4-ethylphenyl, and n = 0. It does not fit the limitations of claim 2 of 10/ 638,848. There are other close analogues taught in 10/817,697 but all of these have methoxy groups on R^3, not permitted by the claim limitations of 10/638,848.

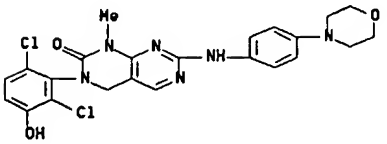
There are five species found in the 10/638,848 case which fit the claim limitations of the case 10/817,697 and which are shown below. The first compound pictured below fits the limitations of











claims 1, 3, 12, 13, 16, and 17 of 10/817,697 with R^1 = alkyl = methyl, $R^2 = R^6 = R^7 = R^{10} = R^{12}$ = H, $R^3 = COR^{10}$ = CHO, $R^4 = R^8$ = Cl, and $R^5 = OR^{12}$. It does not fit the limitations of claims 2, 4-11, 14, 15, 18-24 of 10/817,697.

Listings of the claims and of all the relevant species of cases 10/638,848, 10/623,972, and 10/817,697 are attached.

TCMCK/me

ATTACHMENTS: 6

Day : Friday
Date:
2/17/2006
Time: 12:48:27

PALM INTRANET

Application Number Information

Application Number: 10/638848
Assignments
Examiner Number: 74142 / TRUONG, TAMTHOM
Filing or 371(c) Date: 08/11/2003
Group Art Unit: 1624
IFW IMAGE
Effective Date: 08/11/2003
Class/Subclass: 514/262.100
Application Received: 08/12/2003
Lost Case: NO
Pat. Num./Pub. Num: /20040044012
Interference Number:
Issue Date: 00/00/0000
Unmatched Petition: NO
Date of Abandonment: 00/00/0000
L&R Code: Secrecy Code:1
Attorney Docket Number: 5716-D1
Third Level Review: NO
Secrecy Order: NO
Status: 71 /RESPONSE TO NON-FINAL OFFICE ACTION ENTERED AND FORWARDED TO EXAMINER
Status Date: 10/20/2005
Confirmation Number: 4448
Oral Hearing: NO
Title of Invention: BICYCLIC PYRIMIDINES AND BICYCLIC 3,4-DIHYDROPYRIMIDINES AS INHIBITORS OF CELLULAR PROLIFERATION

E1-E272
L4
L7 (53)

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location

Appln Info | Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inv

Search Another: Application# [ ] Search or Patent# [ ] Search

PCT / [ ] / [ ] Search or PG PUBS # [ ] Search

Attorney Docket # [ ] Search

Bar Code # [ ] Search

Day : Friday
Date:
2/17/2006
Time: 12:48:06

PALM INTRANET

Application Number Information

Application Number: 09/623737
Assignments

Examiner Number: 74142 / TRUONG, TAMTHOM

Filing or 371(c) Date: 09/07/2000

Group Art Unit: 1624

Effective Date: 09/07/2000

Class/Subclass: 514/252.160

Application Received: 09/07/2000

Lost Case: NO

Patent Number:

Interference Number: 104798

Issue Date: 00/00/0000

Unmatched Petition: NO

Date of Abandonment: 00/00/0000

L&R Code: Secrecy Code:1

Attorney Docket Number: 5716-01-CA

Third Level Review: NO

Secrecy Order: NO

Status: 180 /INTERFERENCE -- DECISION ON PRIORITY RENDERED BY BOARD OF INTERFERENCES

Status Date: 03/31/2004

Confirmation Number: 6362

Oral Hearing: NO

Title of Invention: BICYCLIC PYRIMIDINES AND BICYCLIC 3,4-DIHYDROPYPRIMIDINES AS INHIBITORS OF CELLULAR PROLIFERATION

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
09623737	43C1	06/02/2004	No Charge to Location	No Charge to Name	INVENTORY,FORTY8	

Appln Info | Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inv

Search Another: Application# [ ] Search or Patent# [ ] Search

Day : Friday
Date:
2/17/2006
Time: 12:48:06

PALM INTRANET

Application Number Information

Application Number: **09/623737**
Assignments
Filing or 371(c) Date: **09/07/2000**
Effective Date: **09/07/2000**
Application Received: **09/07/2000**
Patent Number:
Issue Date: **00/00/0000**
Date of Abandonment: **00/00/0000**
Attorney Docket Number: **5716-01-CA**

Examiner Number: **74142 / TRUONG, TAMTHOM**
Group Art Unit: **1624**
Class/Subclass: **514/252.160**
Lost Case: **NO**
Interference Number: **104798**
Unmatched Petition: **NO**
L&R Code: Secrecy Code:**1**
Third Level Review: **NO**
Secrecy Order: **NO**

Status: **180 /INTERFERENCE -- DECISION ON PRIORITY RENDERED BY BOARD OF INTERFERENCES**
Status Date: **03/31/2004**
Confirmation Number: **6362**
Oral Hearing: **NO**
Title of Invention: **BICYCLIC PYRIMIDINES AND BICYCLIC 3,4-DIHYDROPYPRIMIDINES AS INHIBITORS OF CELLULAR PROLIFERATION**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
09623737	43C1	06/02/2004	No Charge to Location	No Charge to Name	INVENTORY,FORTY8	

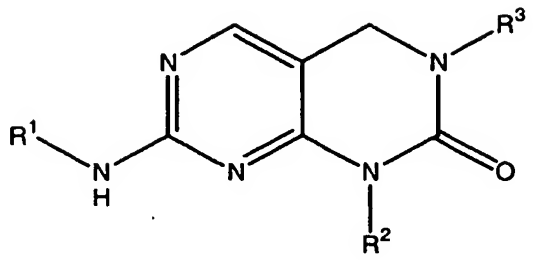
Appln Info | Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inv

Search Another: Application# [ ] Search or Patent# [ ] Search

CLAIMS

What is claimed is:

1. A compound of the formula:



wherein:

R^1 is selected from C_1-C_{10} alkyl, C_2-C_{10} alkenyl, or C_2-C_{10} alkynyl optionally substituted by OH, alkoxy, phenoxy, thio C_1-C_{10} alkyl, or NR^4R^5 ; (CH_2)n-Ar, wherein the $(CH_2)_n$ alkyl chain is optionally substituted by OH, alkoxy, phenoxy, thio C_1-C_{10} alkyl, or NR^4R^5 ; COR^4, wherein R^4 is alkyl optionally substituted by OH, alkoxy, phenoxy, thio C_1-C_{10} alkyl, or NR^4R^5 ; C_3-C_{10} cycloalkyl optionally substituted by OH, alkoxy, phenoxy, NR^4R^5, $SO_2NR^4R^5$, or SO_3R^4; $(CH_2)_n$heterocyclyl; or alkyl optionally substituted by COR^4, CO_2R^4 or $CONR^4R^5$;

R^4 is H or C_1-C_6 alkyl;

R^5 is C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, $(CH_2)_nAr$, C_3-C_{10} cycloalkyl, heterocyclyl or heteroaryl

n is 0 to 3;

R^3 is $(CH_2)_nAr$;

Ar is phenyl optionally substituted by halo or alkyl optionally substituted by OH, alkoxy, phenoxy, thio C_1-C_{10} alkyl, or NR^4R^5 ;

R^2 is hydrogen; C_1-C_{10} alkyl substituted by halo, nitrile, OH, alkoxy, phenoxy, thio C_1-C_{10} alkyl, NR^4R^5 or (CH_2)-heteroaryl; $(CH_2)_nAr$, wherein n is 0-3; -(CH_2)-heteroaryl; C_3-C_{10} cycloalkyl optionally substituted by OH, alkoxy, phenoxy, NR^4R^5, $SO_2NR^4R^5$, or SO_3R^4; (CH_2)-heterocyclyl; or COR^4;

R^4 is H, C_1-C_6 alkyl optionally substituted by halogen; NR^5R^6; cycloalkyl; or (CH_2)-Ar;

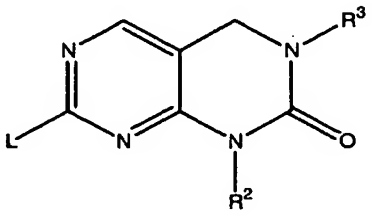
R^5 and R^6 are independently C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, $(CH_2)_nAr$, C_3-C_{10} cycloalkyl, heterocyclyl or heteroaryl; or a pharmaceutically acceptable salt form thereof.

2. A compound of Claim 1 wherein R^3 is $(CH_2)_nAr$ substituted by one or two halogens.

3. A compound of Claim 1 wherein R^2 is hydrogen; C_1-C_{10} alkyl optionally substituted by halo, nitrile, OH, alkoxy, phenoxy, thio C_1-C_{10} alkyl, NR^4R^5 or (CH_2)-heteroaryl.

4. A method for the preparation of a compound of Claim 1, said method comprising:

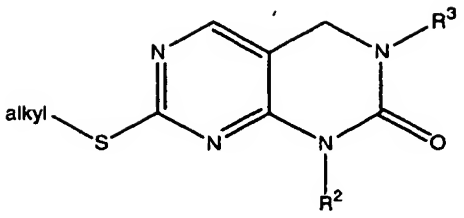
(a) treating a compound of the formula:



wherein L is a leaving group, with an amine of the formula R^1-NH_2, wherein n, R^1, R^2 and R^3 have the meanings provided in Claim 1.

5. A method for the preparation of a compound of Claim 1, said method comprising:

(a) treating a compound of the formula:

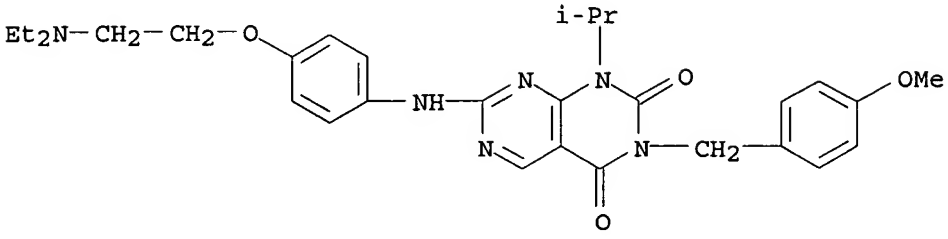


with an oxidizing agent followed by an amine of the formula R^1-NH_2, wherein n, R^1, R^2 and R^3 have the meanings provided in Claim 1.

6. A pharmaceutical composition comprising a pharmaceutically effective amount of a compound of Claim 1 and a pharmaceutically acceptable carrier.

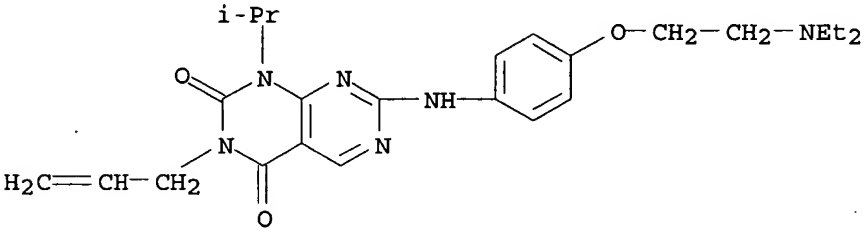
=> 10/638,848 compounds

L7 ANSWER 1 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



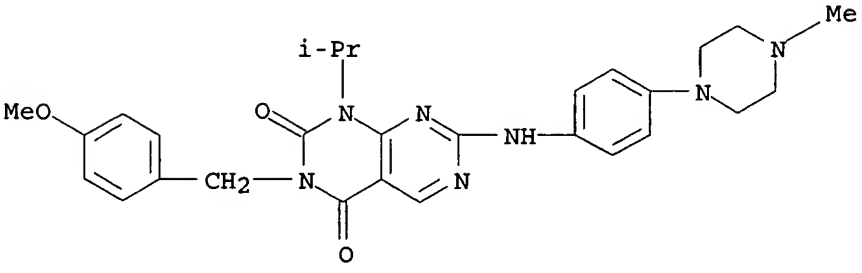
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 2 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

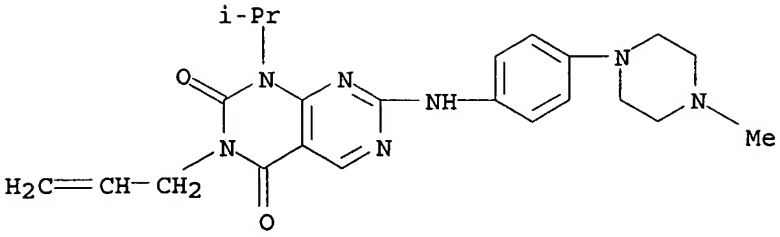
L7 ANSWER 3 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

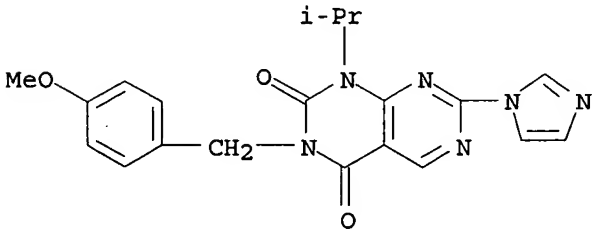
Thomas McKenzie

L7 ANSWER 4 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



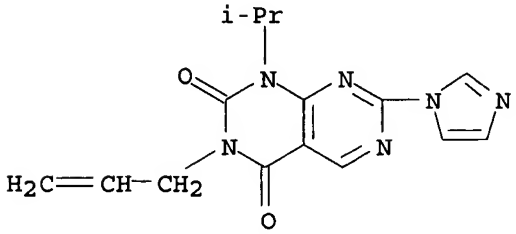
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 5 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



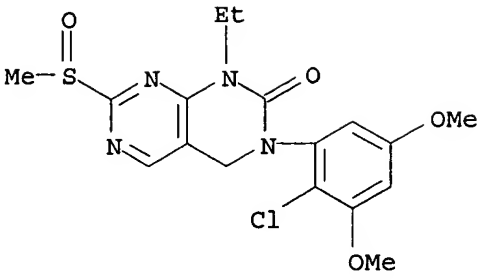
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 6 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



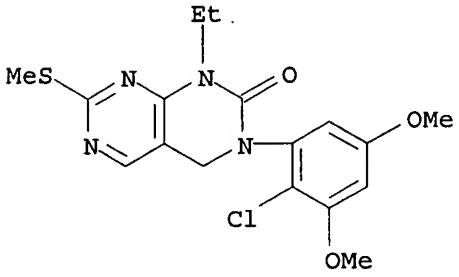
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 7 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



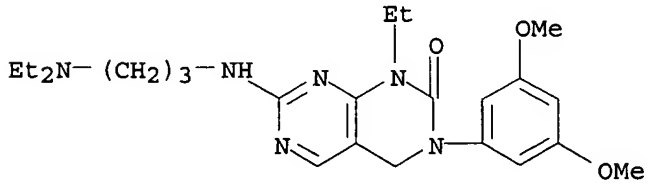
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 8 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

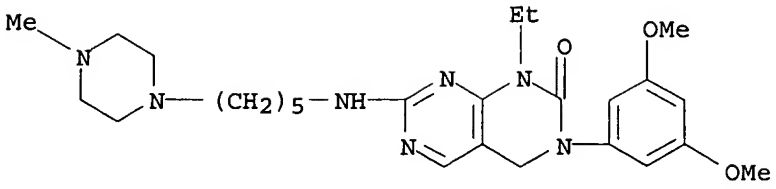
L7 ANSWER 9 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

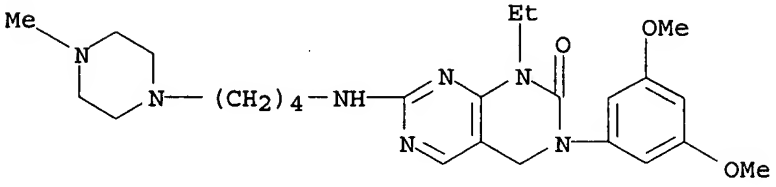
L7 ANSWER 10 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN

Thomas McKenzie



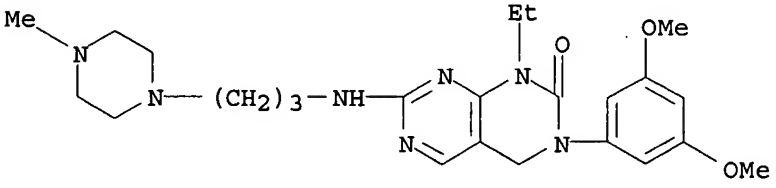
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 11 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



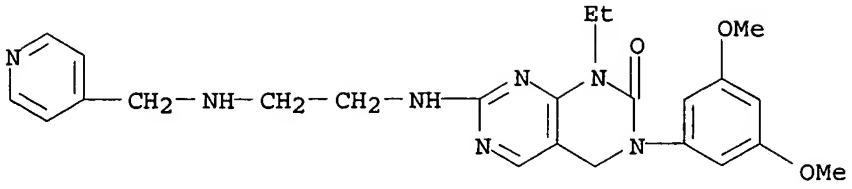
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 12 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



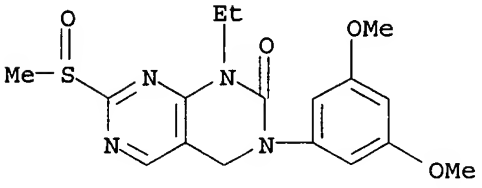
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 13 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



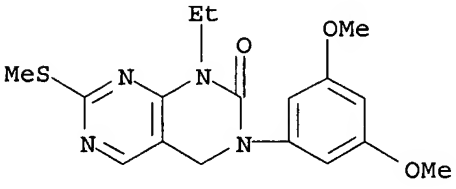
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 14 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



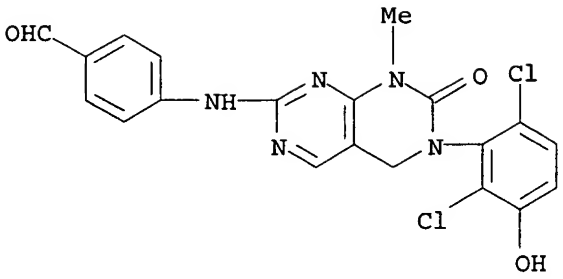
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 15 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



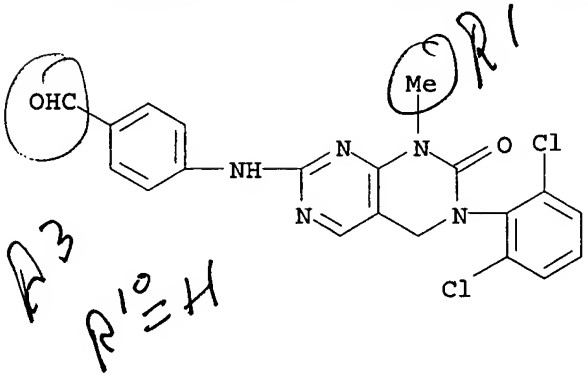
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 16 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



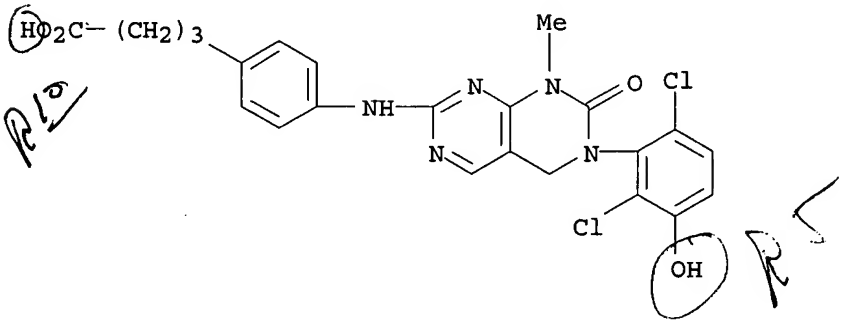
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 17 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



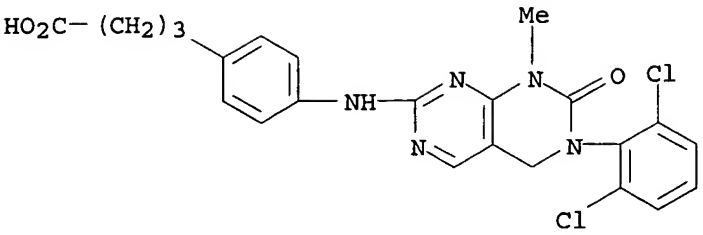
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 18 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



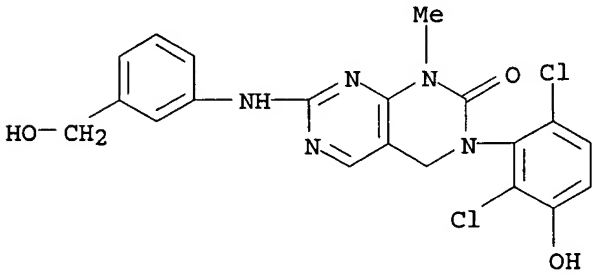
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 19 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



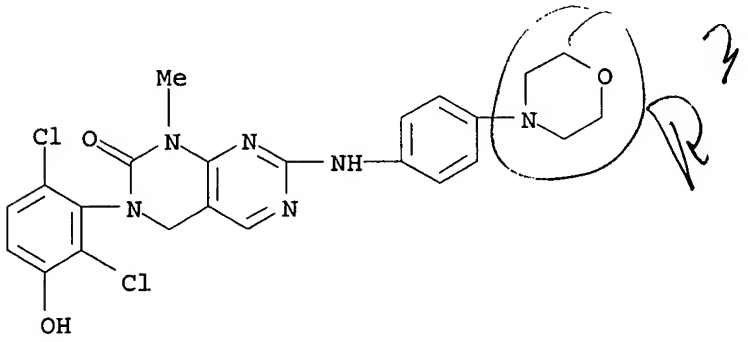
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 20 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



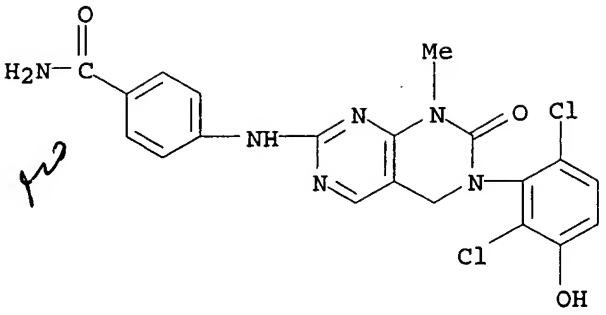
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 21 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



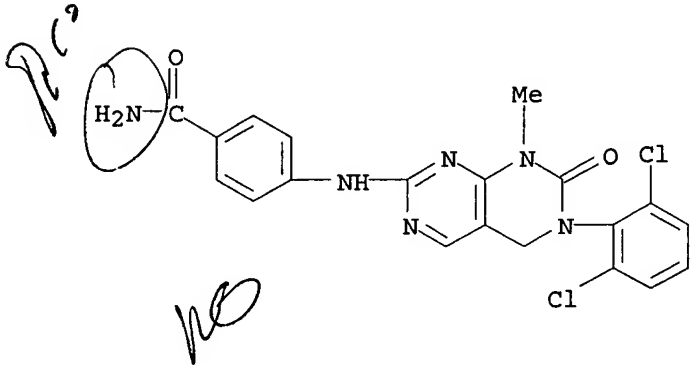
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 22 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



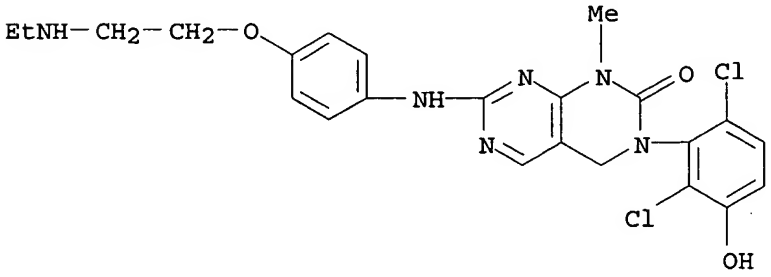
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 23 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

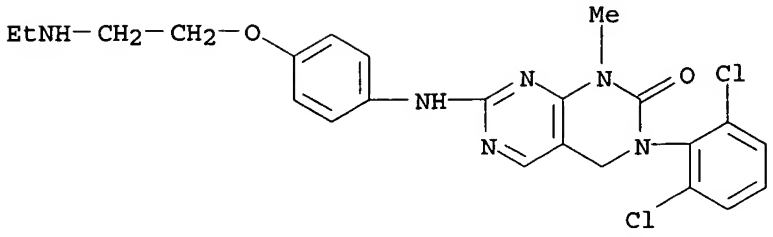
L7 ANSWER 24 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

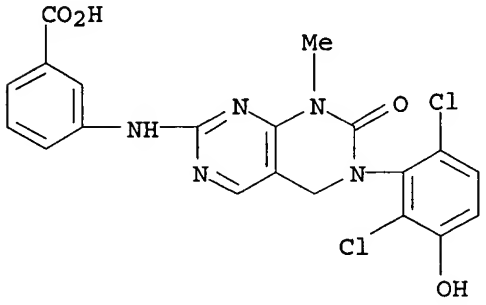
Thomas McKenzie

L7 ANSWER 25 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



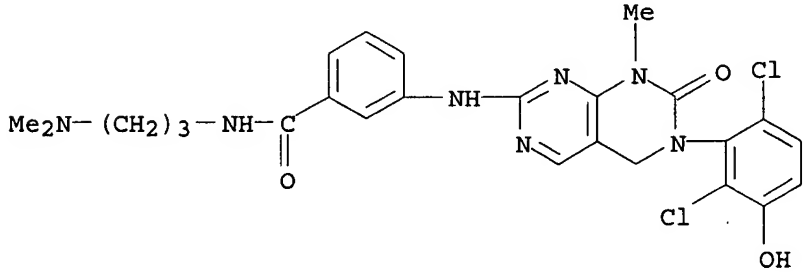
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 26 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



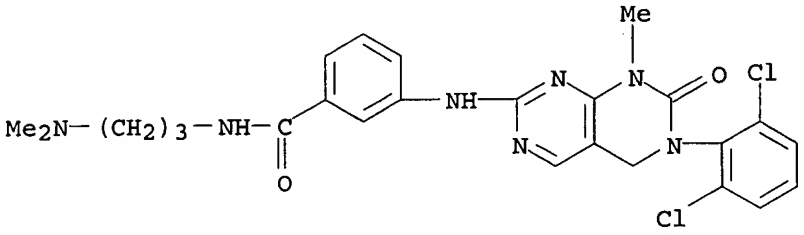
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 27 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



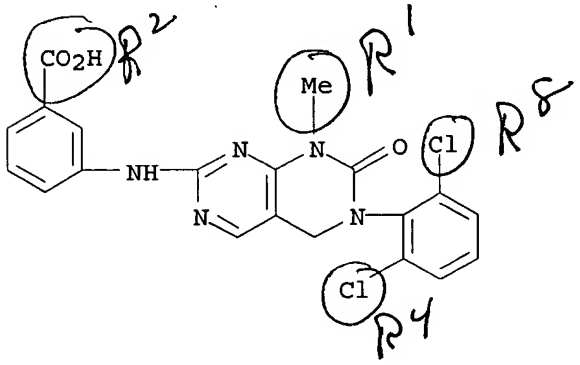
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 28 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

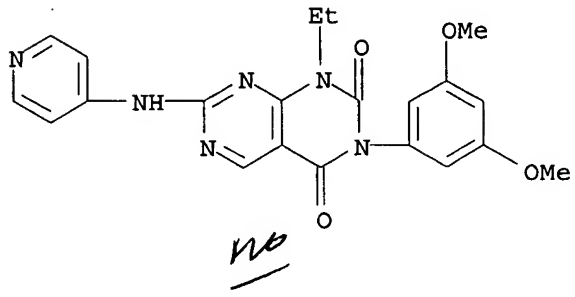
L7 ANSWER 29 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



doesn't fit limitation of R2 in 10/817,697

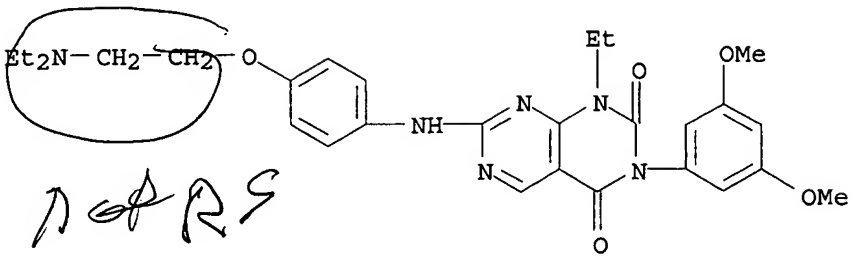
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 30 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



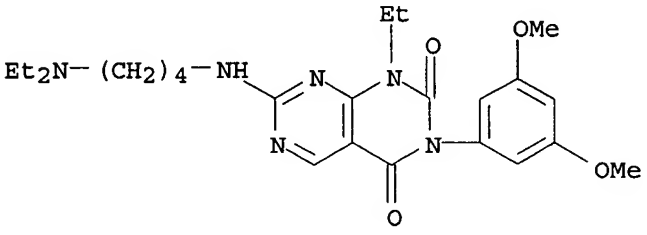
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 31 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



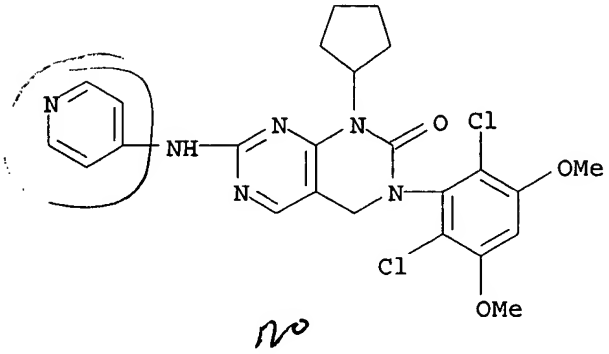
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 32 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

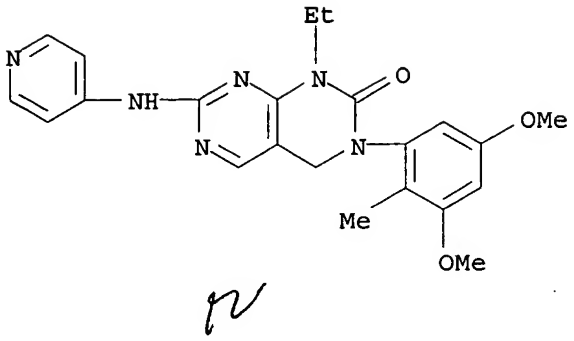
L7 ANSWER 33 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

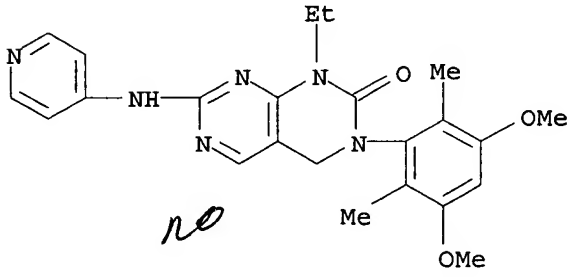
Thomas McKenzie

L7 ANSWER 34 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



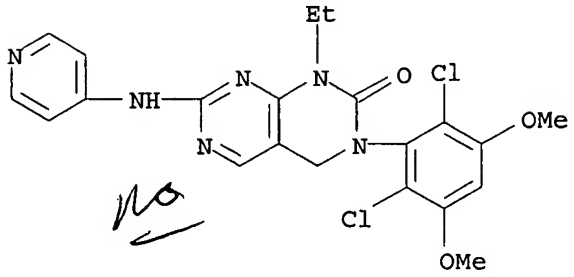
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 35 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



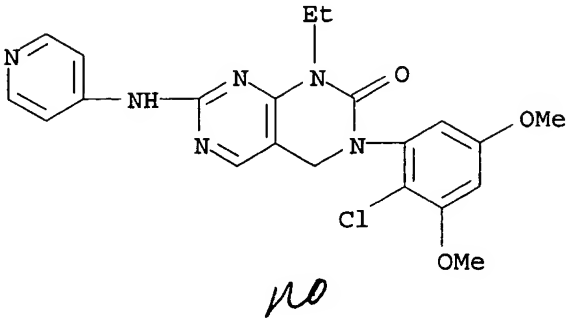
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 36 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



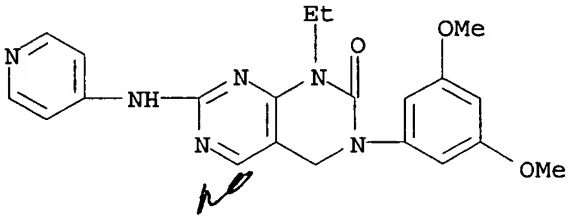
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 37 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



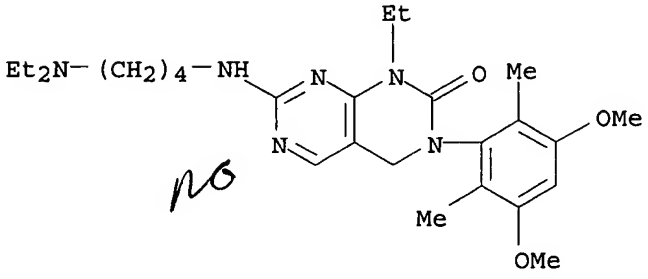
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 38 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



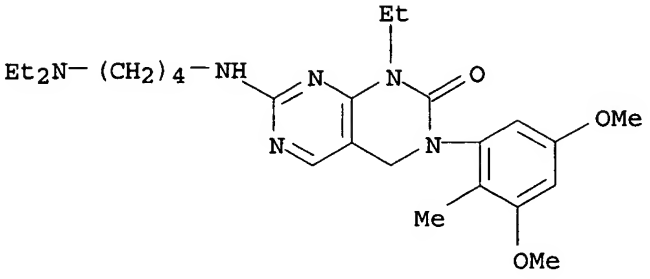
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 39 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



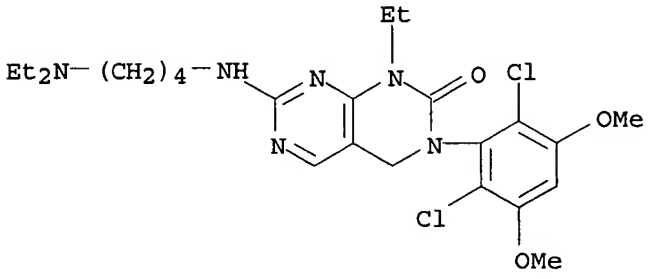
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 40 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



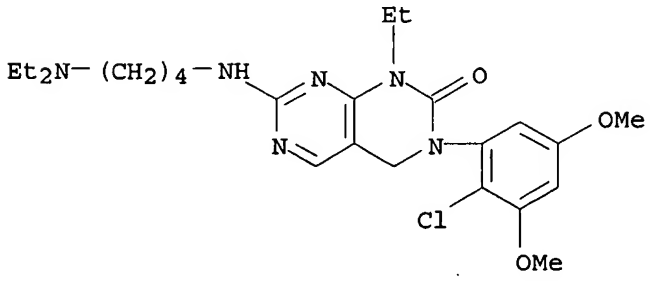
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 41 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



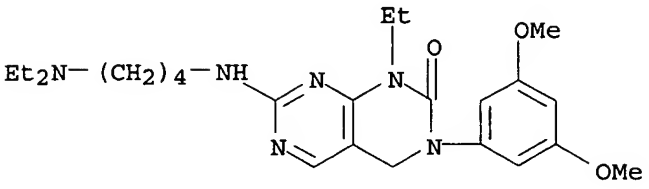
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 42 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



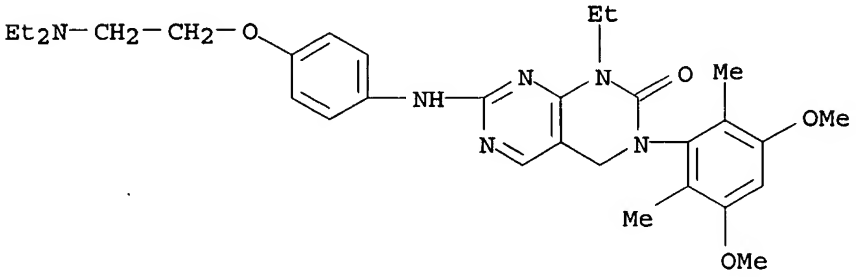
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 43 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



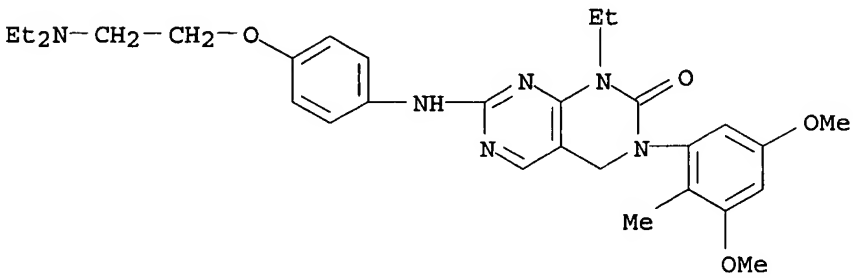
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 44 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



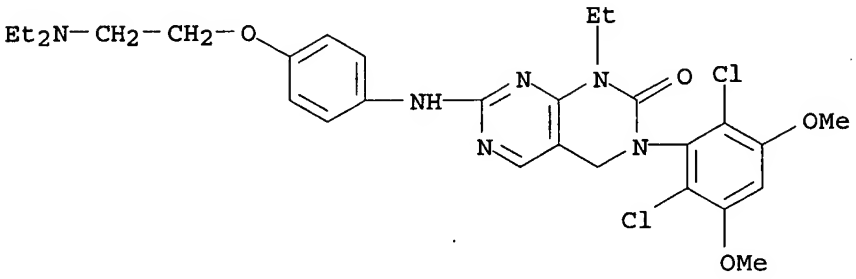
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 45 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



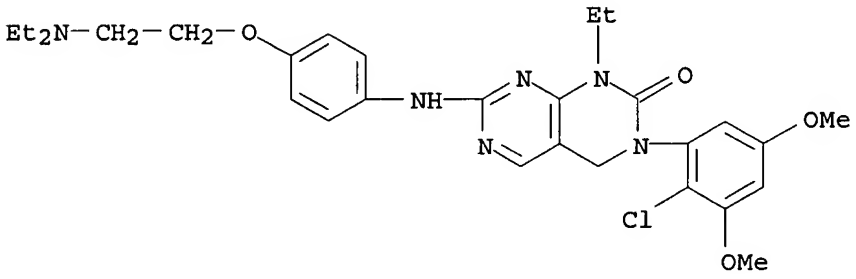
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 46 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



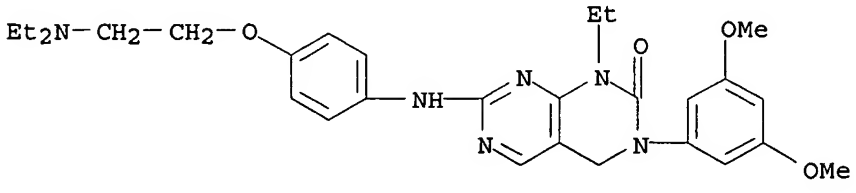
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 47 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



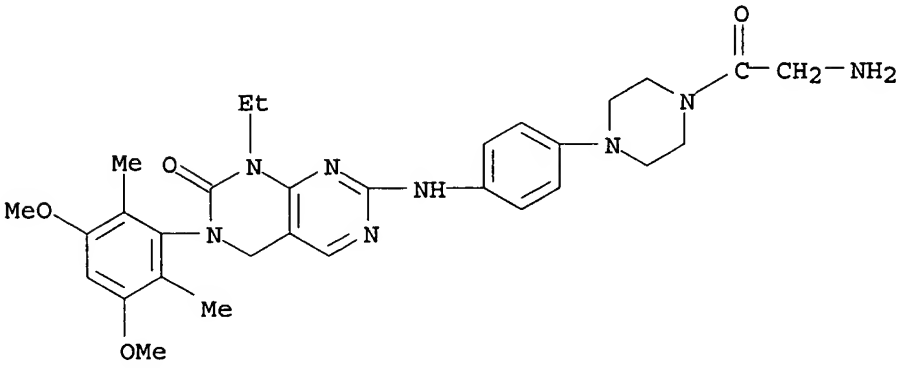
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 48 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



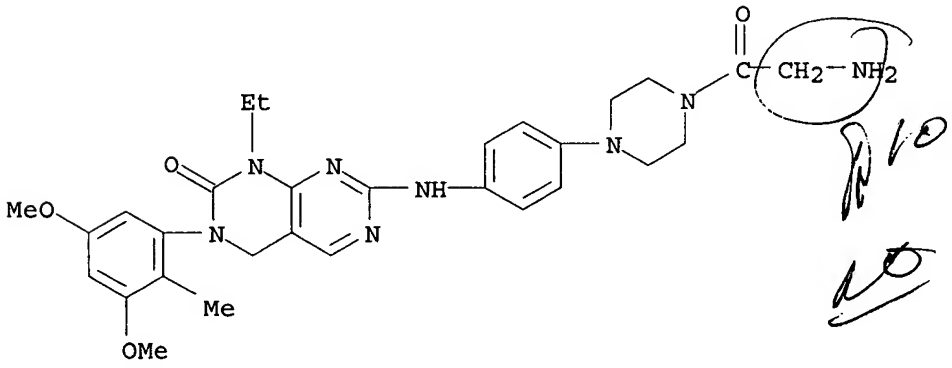
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 49 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



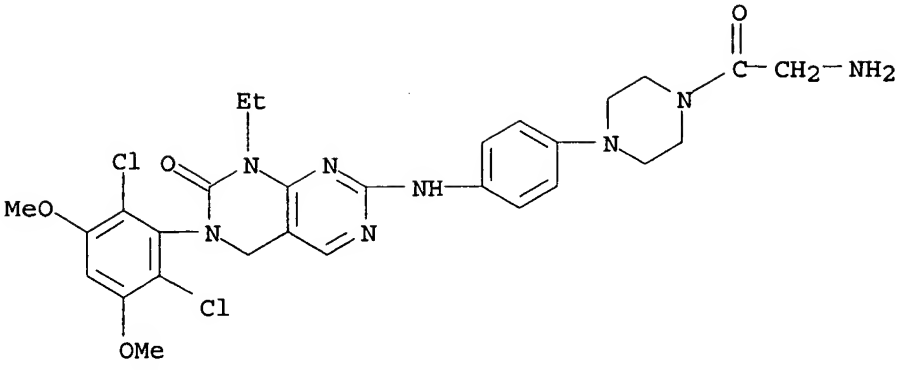
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 50 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



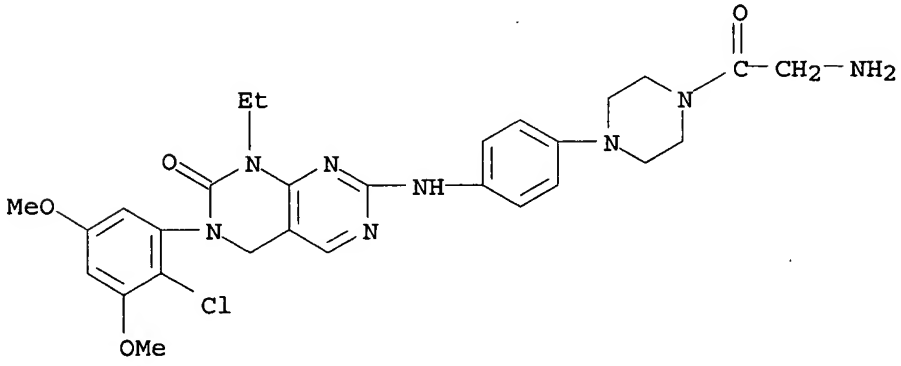
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 51 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



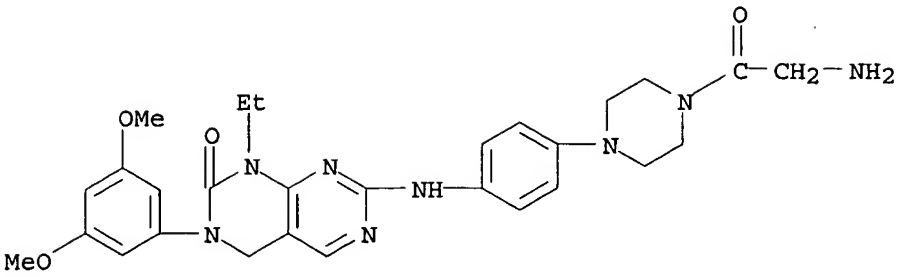
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 52 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 ANSWER 53 OF 53 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Day : Friday
Date:
2/17/2006
Time: 12:57:11

PALM INTRANET

Application Number Information

Application Number: 10/623972
Assignments

Examiner Number: 80316 / WARD, PAUL

Filing or 371(c) Date: 07/21/2003

Group Art Unit: 1623

IFW IMAGE

Effective Date: 07/21/2003

Class/Subclass: 544/256.000

Application Received: 07/22/2003

Lost Case: NO

Waiting for Response Desc.
Query Request Mail N/=.

Pat. Num./Pub. Num: /20040038995

Interference Number:

Issue Date: 00/00/0000

Unmatched Petition: NO

Date of Abandonment: 00/00/0000

L&R Code: Secrecy Code:1

Attorney Docket Number: 21266 US1

Third Level Review: NO

Secrecy Order: NO

Status: 94 /PUBLICATIONS -- ISSUE FEE PAYMENT RECEIVED

Status Date: 01/04/2006

Confirmation Number: 5346

Oral Hearing: NO

Title of Invention: PYRIMIDO COMPOUNDS HAVING ANTIPROLIFERATIVE ACTIVITY

E 446-E 56
L2 (84)
L9 (41)

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
10623972IW	7410	01/04/2006	No Charge to Location	No Charge to Name	BABAAN,NOEL	IDC/01/

Appln Info | Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inv

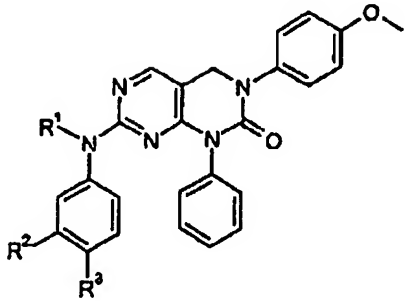
Search Another: Application# [ ] Search or Patent# [ ] Search

PCT / [ ] / [ ] Search or PG PUBS # [ ]

Serial No. 10/623,972
Filed: July 21, 2003

IN THE CLAIMS

1. (Currently amended) A compound of formula:



I,

wherein

R^1 is selected from the group

-H,

$-COR^4$, and

$-COOCHR^5OCOR^4$;

R^2 and R^3 are independently selected from

-H, and

$-OR^5$;

R^4 is selected from the group

$-C_{1-6}$ alkyl,

-lower alkyl substituted by up to 4 groups independently selected from

$-NR^5R^6$,

$-SR^5$,

$-OR^5$,

-aryl,

-aryl substituted by up to 2 groups independently selected from

-OR^5 and C_{1-4} lower alkyl, and

-heteroaryl, and

-heterocycle;

R^5 and R^6 are independently selected from

-H, and

- C_{1-5} lower alkyl,

or, alternatively, -NR^5R^6 can form a ring having 3 to 7 atoms, said ring optionally including one or more additional N or O atoms;

or the pharmaceutically acceptable salts thereof.

2. (Original) The compound of claim 1 wherein R^1 is -COR^4.

3. (Original) The compound of claim 2 wherein R^2 is H.

4. (Original) The compound of claim 3 wherein R^3 is H.

5. (Previously presented) The compound of claim 4 which is selected from the group:

N-[3-(4-Methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylacetamide;

N-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylpropanamide;

2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylacetamide acetic acid salt;

2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylacetamide hydrochloric acid salt;

(2*S*)-2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-4-methylthio-*N*-phenylbutanamide;

(2*S*)-2-amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-4-methylthio-*N*-phenylbutanamide acetic acid salt;

(2*S*)-2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-4-methylthio-*N*-phenylbutanamide hydrochloric acid salt;

(2*S*)-2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-3-phenyl-*N*-phenylpropanamide;

(2*S*)-2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-3-phenyl-*N*-phenylpropanamide hydrochloric acid salt;

(2*S*)-2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-4-methyl-*N*-phenylpentanamide acetic acid salt;

(2*S*)-2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-4-methyl-*N*-phenylpentanamide hydrochloric acid salt;

(2*S*)-2-Amino-3-(4-hydroxyphenyl)-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylpropanamide hydrochloric acid salt;

(2*S*)-2,6-Diamino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylhexanamide di-hydrochloric acid salt;

(2*S*)-2-Amino-3-indol-3-yl-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylpropanamide hydrochloric acid salt ;

(2*S*)-2-Amino-3-hydroxy-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylpropanamide;

(2*R*)-2-Amino-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-4-methylthio-*N*-phenylbutanamide hydrochloric acid salt;

N-[3-(4-Methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylpentanamide; and

N-[3-(4-Methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylbutanamide.

6. (Previously presented) The compound of claim 2 which is selected from the group:

N-(4-Hydroxyphenyl)-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]acetamide; and

N-(4-methoxyphenyl)-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]acetamide.

7. (Original) The compound of claim 1 wherein R^1 is $-COOCHR^5OCOR^4$.

8. (Original) The compound of claim 7 wherein R^2 is H.

9. (Original) The compound of claim 8 wherein R^3 is H.

10. (Previously presented) The compound of claim 9 which is selected from the group:

{*N*-[3-(4-Methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylcarbamoyloxy}methyl acetate;

{*N*-[3-(4-Methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylcarbamoyloxy}methyl 2-(dimethylamino)acetate;

{*N*-[3-(4-Methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylcarbamoyloxy}methyl 2-(dimethylamino)acetate hydrochloric acid salt; and

{*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-phenylcarbamoyloxy}methyl piperidine-4-carboxylate trifluoroacetic acid salt.

11. (Original) The compound of claim 1 wherein R^1 is H.

12. (Original) The compound of claim 11 wherein R^2 is H.

13. (Previously presented) The compound of claim 12 which is selected from the group:

3-(4-Methoxyphenyl)-1-phenyl-7-(phenylamino)-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one;

3-(4-Methoxyphenyl)-1-phenyl-7-(phenylamino)-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one methanesulfonate salt;

7-[(4-Hydroxyphenyl)amino]-3-(4-methoxyphenyl)-1-phenyl-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one; and

3-(4-Methoxyphenyl)-7-[(4-methoxyphenyl)amino]-1-phenyl-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one.

14. (Original) A compound selected from the group:

3-(4-Methoxyphenyl)-1-phenyl-7-(phenylamino)-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one,

3-(4-Methoxyphenyl)-1-phenyl-7-(phenylamino)-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one methanesulfonate salt,

7-[(4-Hydroxyphenyl)amino]-3-(4-methoxyphenyl)-1-phenyl-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one, and

3-(4-Methoxyphenyl)-7-[(4-methoxyphenyl)amino]-1-phenyl-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one.

15. (Original) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and pharmaceutically acceptable carrier or excipient.

Claim 16. (Canceled).

Claim 17. (Canceled).

18. (Previously presented) A method of treating lung, colon or prostate cancer comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of claim 1.

Claim 19. (Cancelled).

20. (Previously presented) A compound selected from the group:

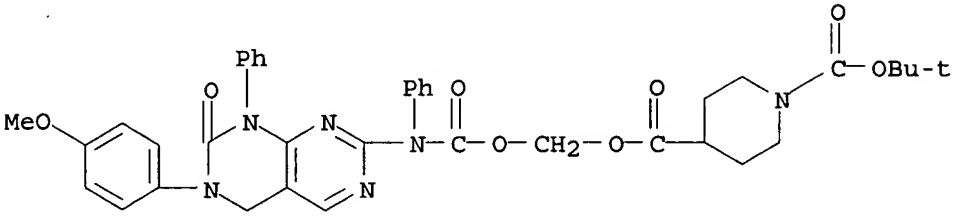
(Chloromethoxy)-*N*-[3-(4-methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-benzamide,

3-(4-Methoxyphenyl)-1-phenyl-7-{[4-(1,1,2,2-tetramethyl-1-silapropoxy) phenyl]amino}-1,3,4-trihydropyrimidino[4,5-d]pyrimidin-2-one, and

N-[3-(4-Methoxyphenyl)-2-oxo-1-phenyl(1,3,4-trihydropyrimidino[4,5-d]pyrimidin-7-yl)]-*N*-[4-(1,1,2,2-tetramethyl-1-silapropoxy)phenyl]acetamide.

=> 10/623,972 compounds

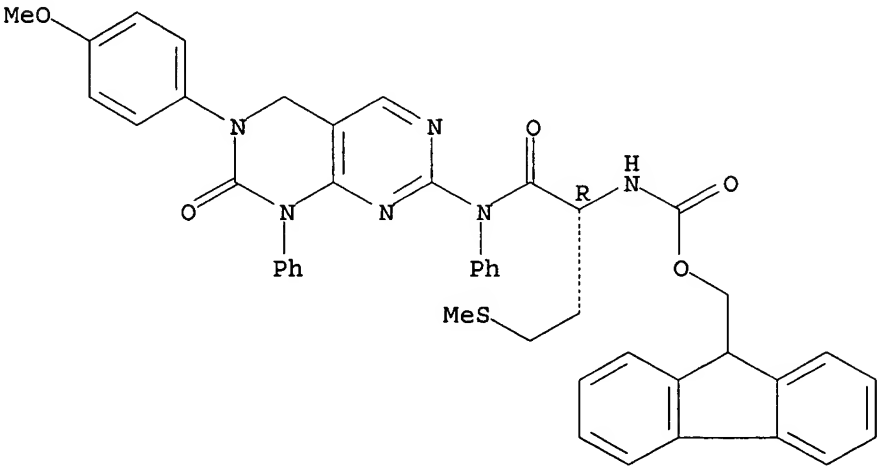
L9 ANSWER 1 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 2 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

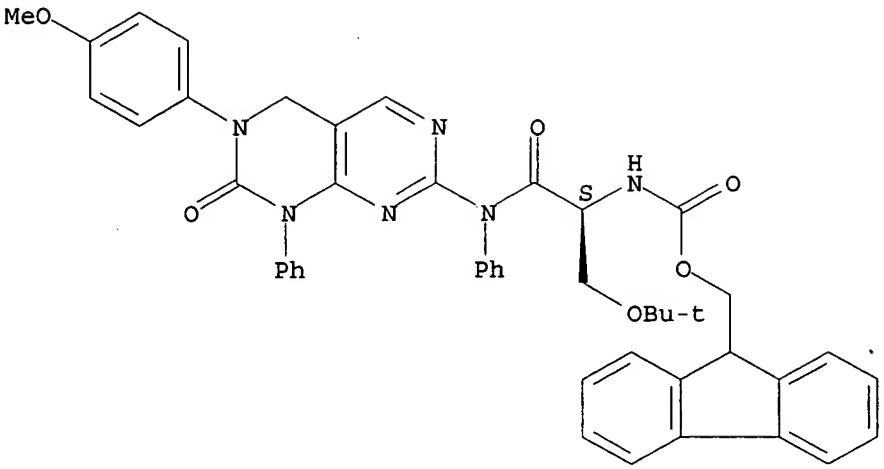
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 3 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

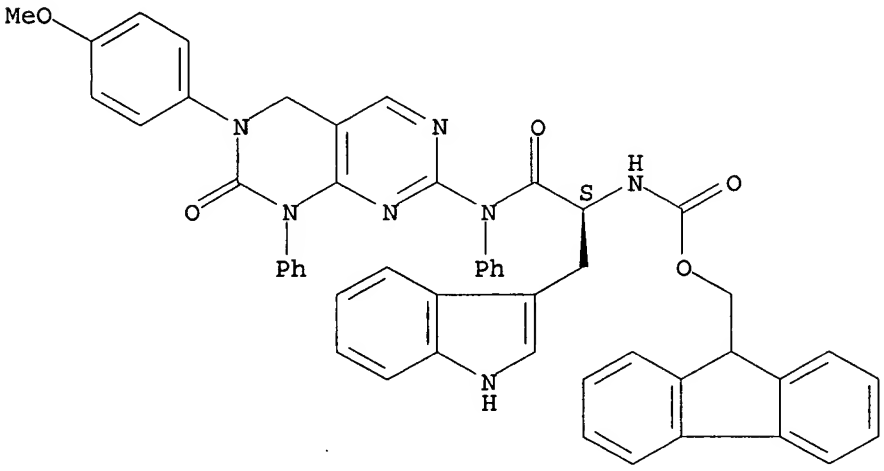
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 4 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.

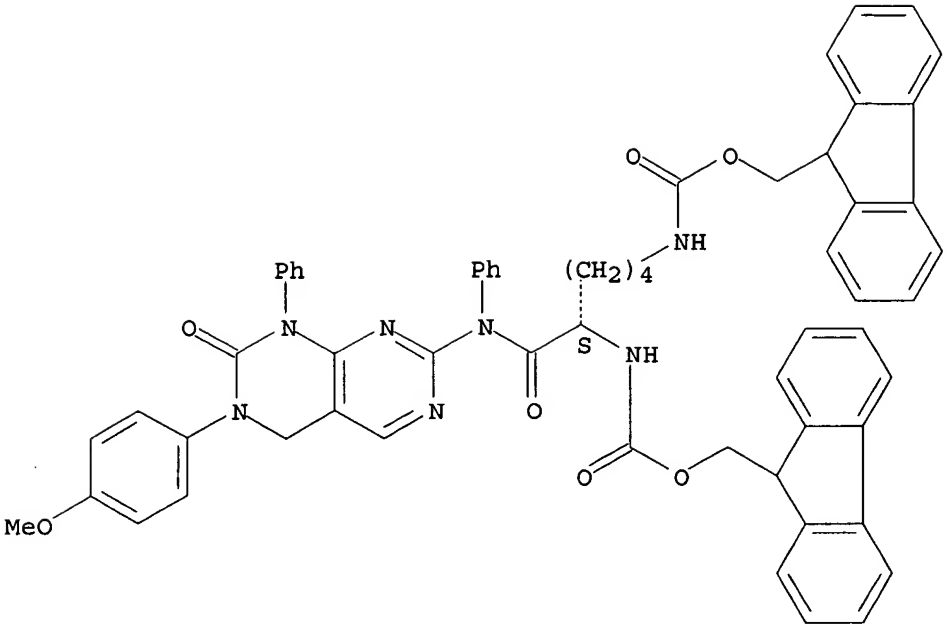


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 5 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.

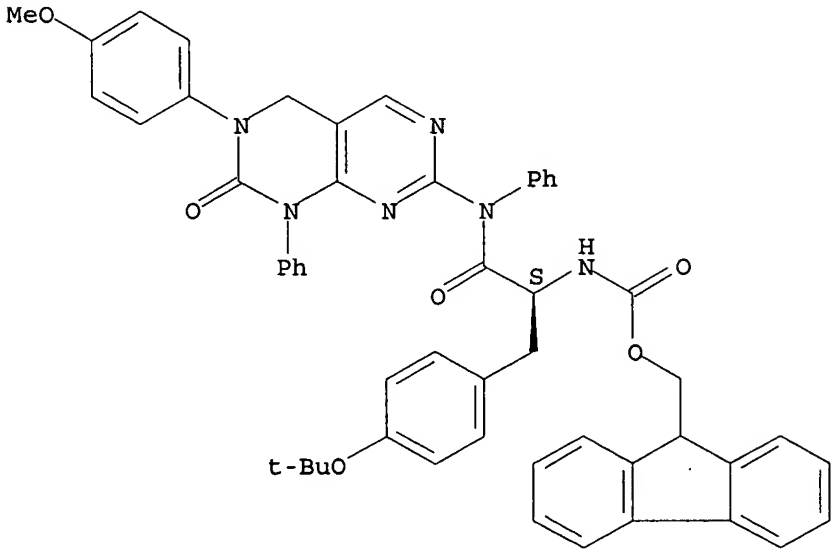
Thomas McKenzie



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 6 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

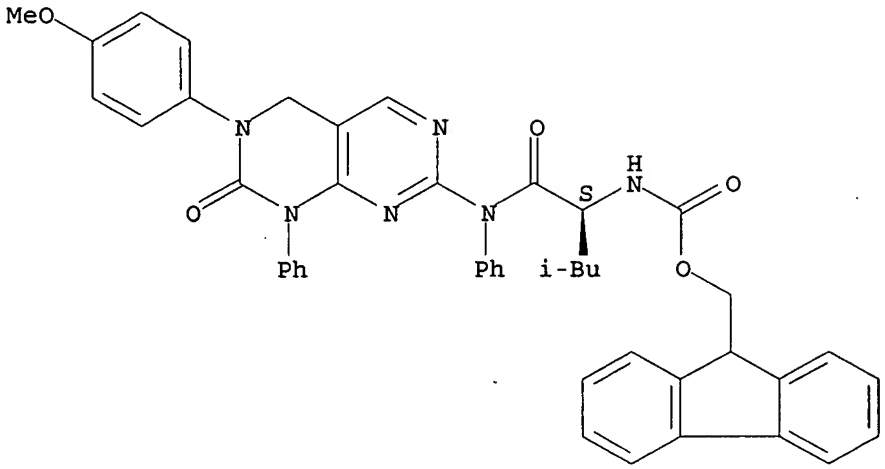
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 7 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

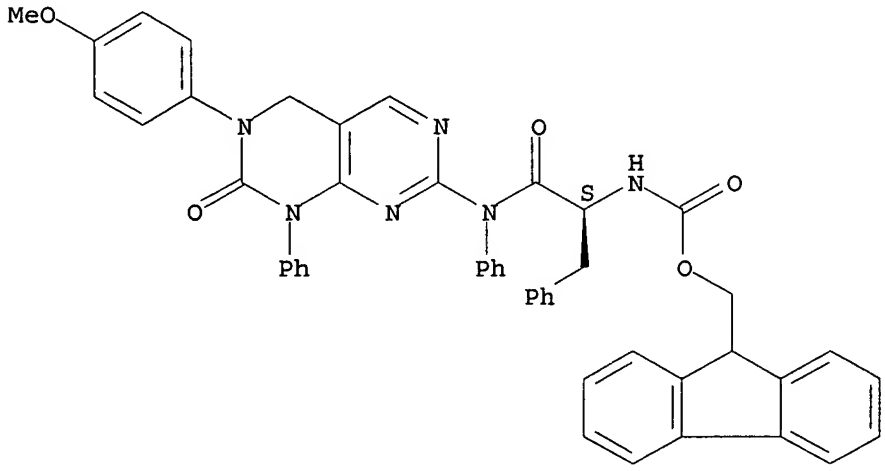
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 8 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

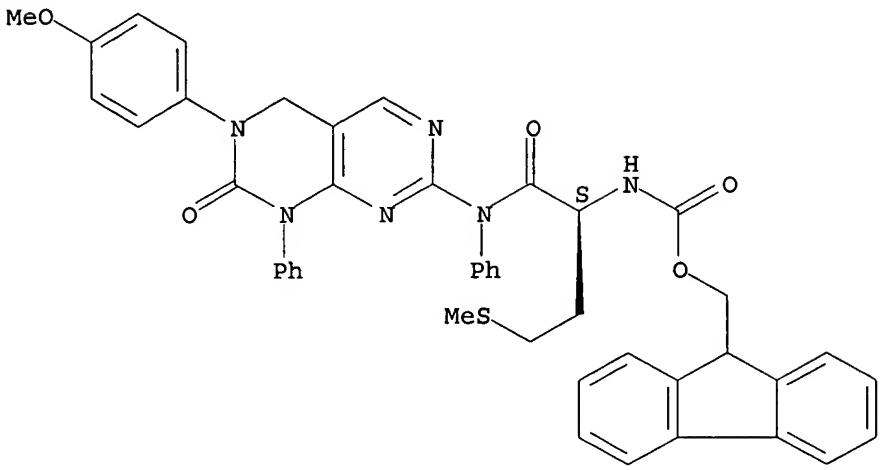
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

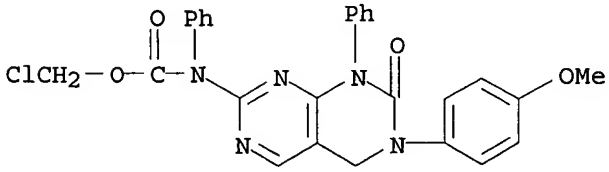
L9 ANSWER 9 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



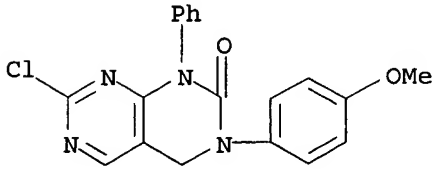
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 10 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

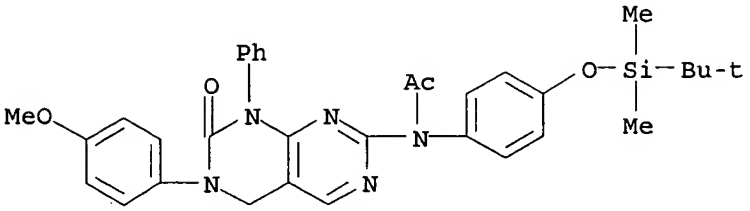
L9 ANSWER 11 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



Thomas McKenzie

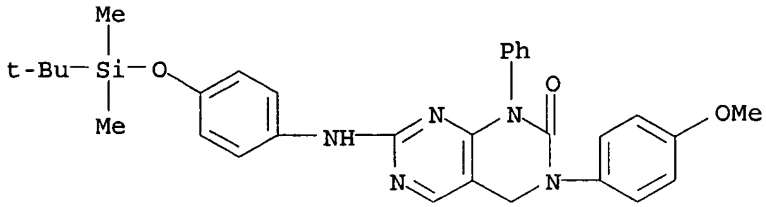
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 12 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

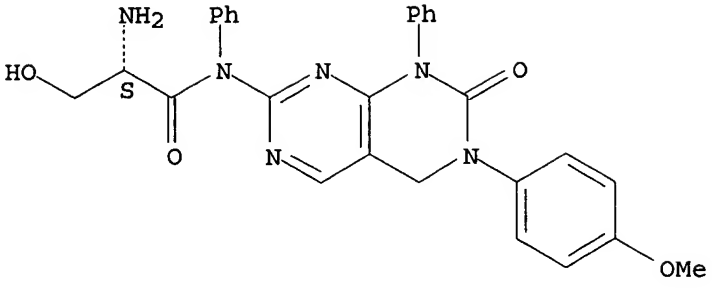
L9 ANSWER 13 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 14 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

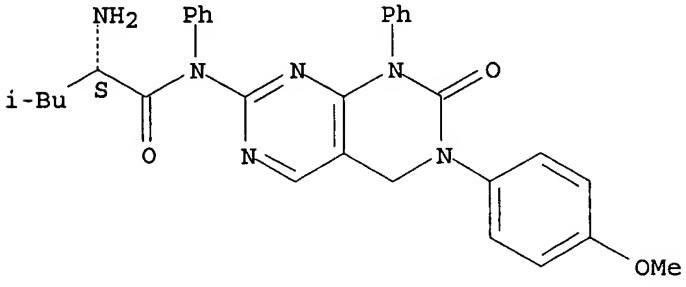
Absolute stereochemistry.



● HCl

L9 ANSWER 15 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.

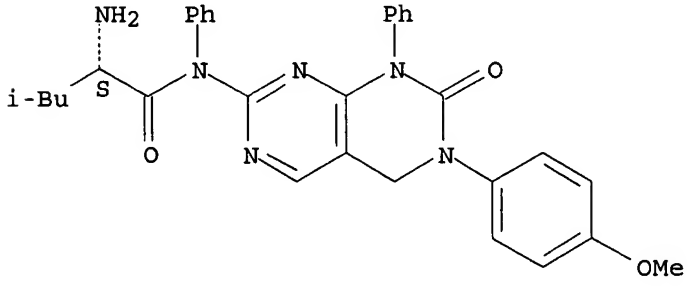


● HCl

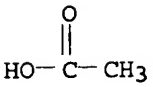
L9 ANSWER 16 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

CM 1

Absolute stereochemistry.

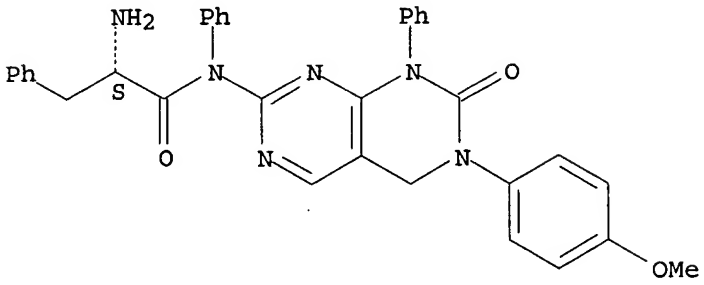


CM 2



L9 ANSWER 17 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

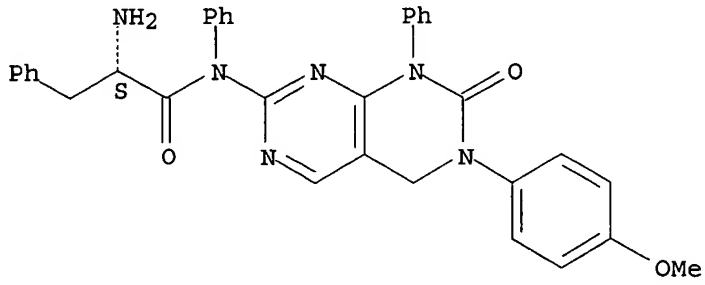
Absolute stereochemistry.



● HCl

L9 ANSWER 18 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

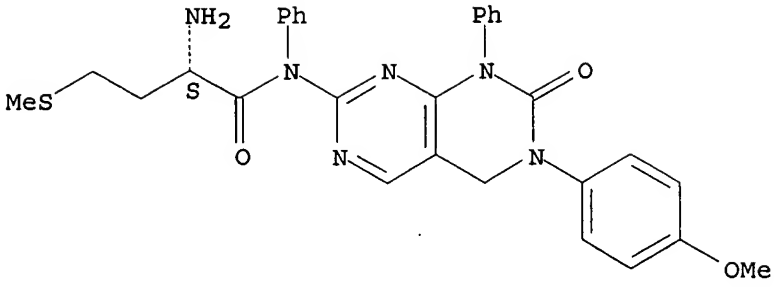
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 19 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.

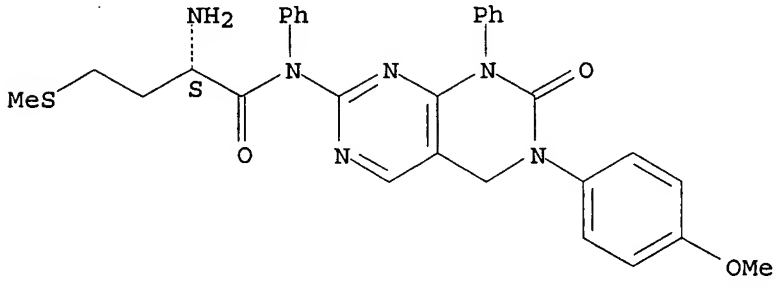


● HCl

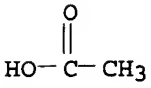
L9 ANSWER 20 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

CM 1

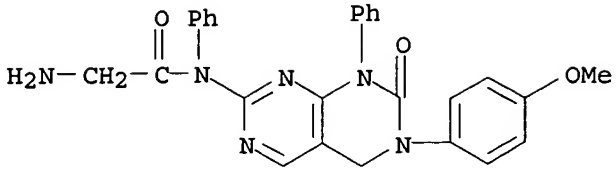
Absolute stereochemistry.



CM 2

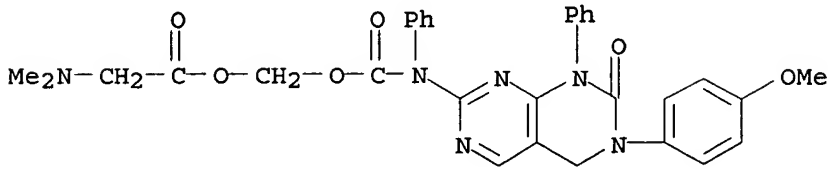


L9 ANSWER 21 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



● HCl

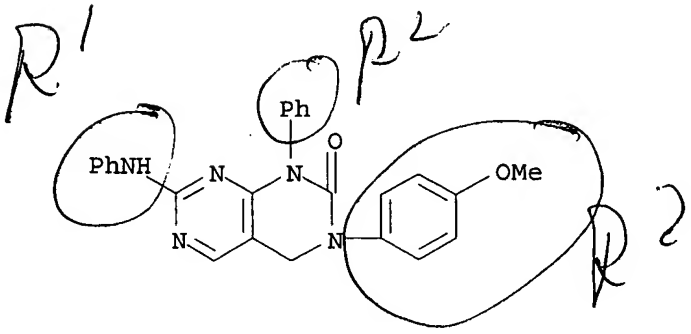
L9 ANSWER 22 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



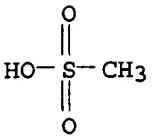
● HCl

L9 ANSWER 23 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

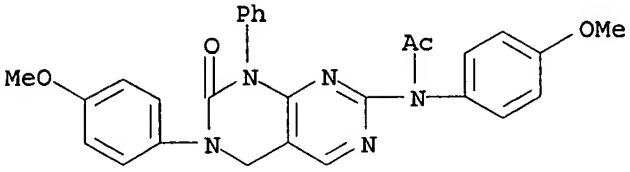
CM 1



CM 2

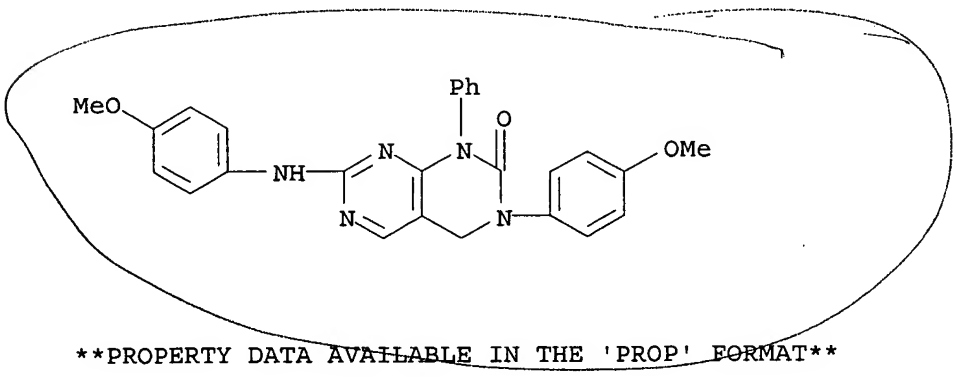


L9 ANSWER 24 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



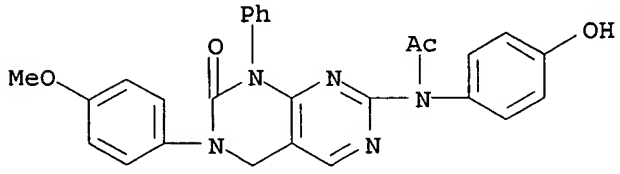
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 25 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



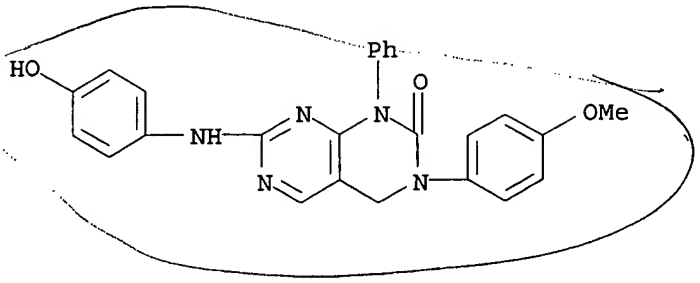
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 26 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



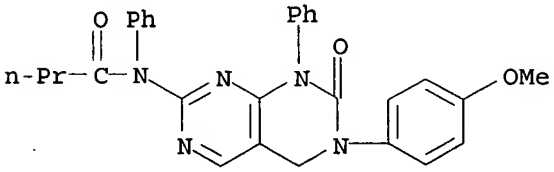
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 27 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



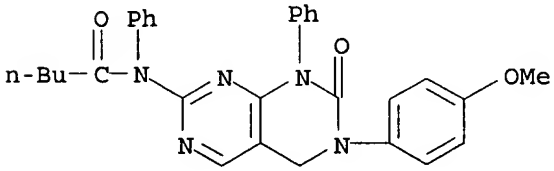
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 28 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

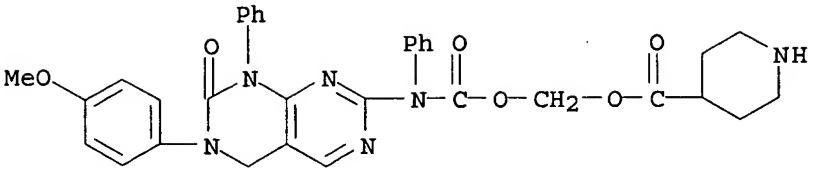
L9 ANSWER 29 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



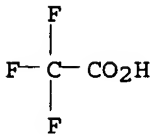
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 30 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

CM 1

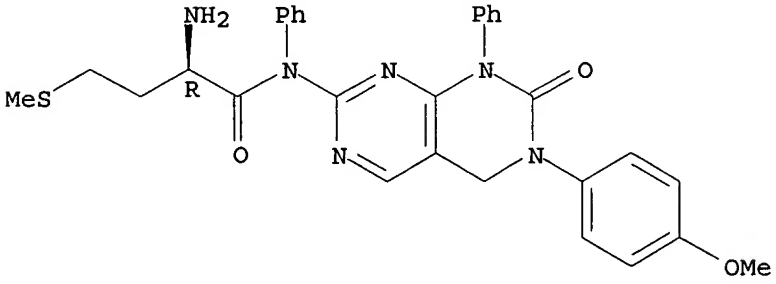


CM 2



L9 ANSWER 31 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

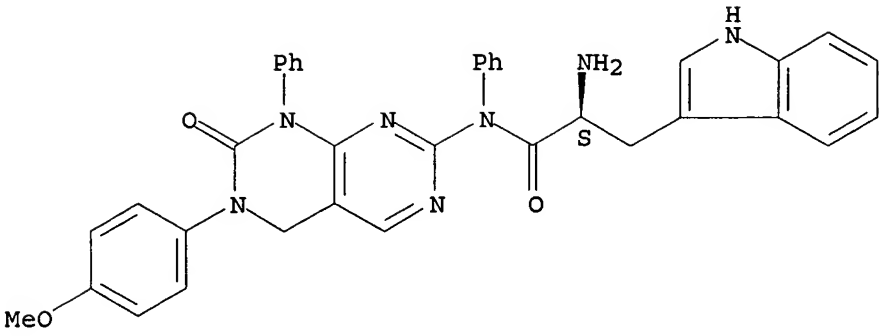
Absolute stereochemistry.



● HCl

L9 ANSWER 32 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

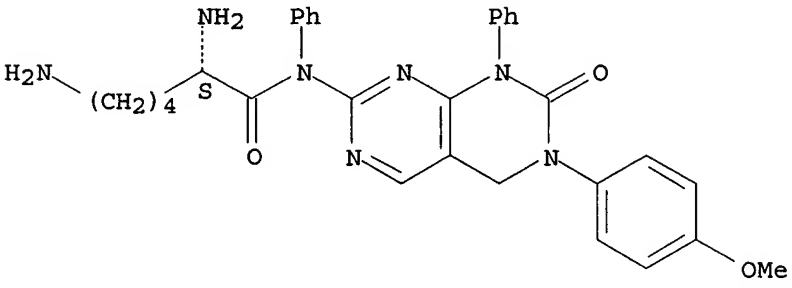
Absolute stereochemistry.



● HCl

L9 ANSWER 33 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

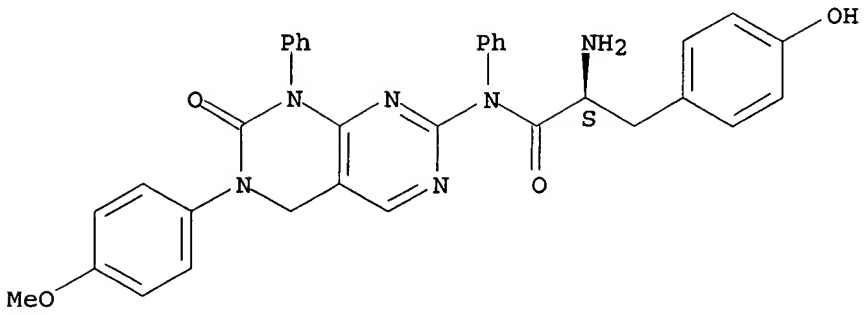
Absolute stereochemistry.



●2 HCl

L9 ANSWER 34 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

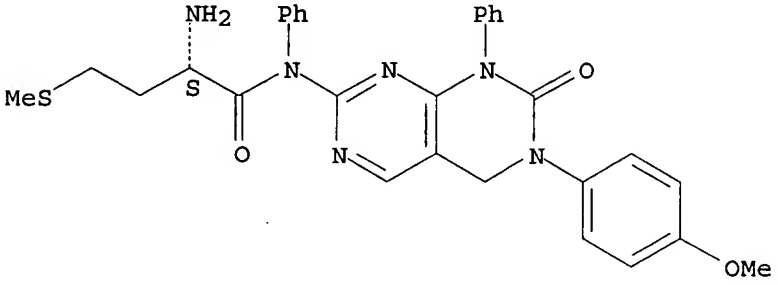
Absolute stereochemistry.



● HCl

L9 ANSWER 35 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

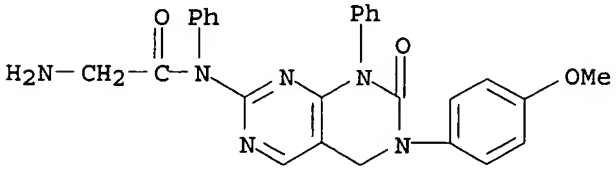
Absolute stereochemistry.



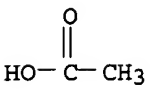
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 36 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN

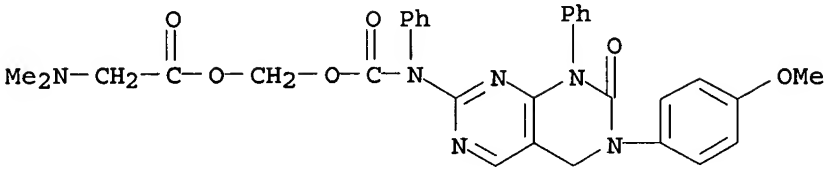
CM 1



CM 2

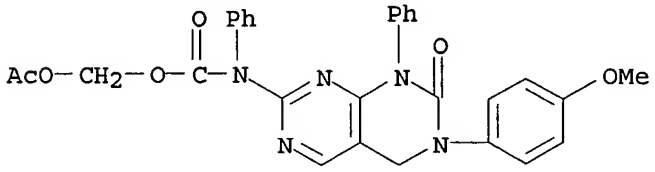


L9 ANSWER 37 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



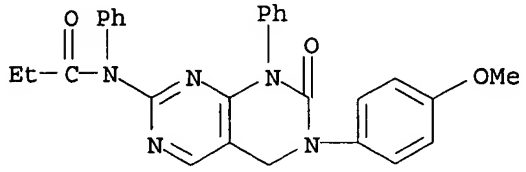
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 38 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



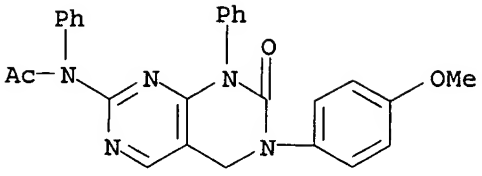
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 39 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



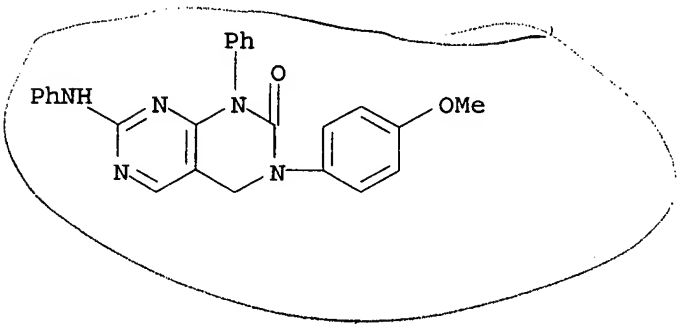
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 40 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 ANSWER 41 OF 41 REGISTRY COPYRIGHT 2006 ACS on STN



Day : Friday
Date:
2/17/2006
Time: 13:01:11

PALM INTRANET

Application Number Information

Application Number: **10/817697**
Assignments
Filing or 371(c) Date: **04/02/2004**
Effective Date: **04/02/2004**
Application Received: **04/05/2004**
Pat. Num./Pub. Num: **/20040204427**
Issue Date: **00/00/0000**
Date of Abandonment: **00/00/0000**
Attorney Docket Number: **21635US1**
Status: **93 /NOTICE OF ALLOWANCE MAILED -- APPLICATION RECEIVED IN OFFICE OF PUBLICATIONS**
Confirmation Number: **3178**

Examiner Number: **77575 / MCKENZIE, THOMAS**
Group Art Unit: **1624**
Class/Subclass: **544/256.000**
Lost Case: **NO**
Interference Number:
Unmatched Petition: **NO**
L&R Code: Secrecy Code:**1**
Third Level Review: **NO**
Status Date: **02/06/2006**
Oral Hearing: **NO**

IFW IMAGE
Waiting for Response Desc.
Mail N/=.
F- 21F → F445
Secrecy Order: **NO**
15 (168)
1F (79)

Title of Invention: **PYRIMIDO COMPOUNDS HAVING ANTIPROLIFERATIVE ACTIVITY**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location

Appln Info | Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inv

Search Another: Application# [ ] Search or Patent# [ ] Search

PCT / [ ] / [ ] Search or PG PUBS # [ ] Search

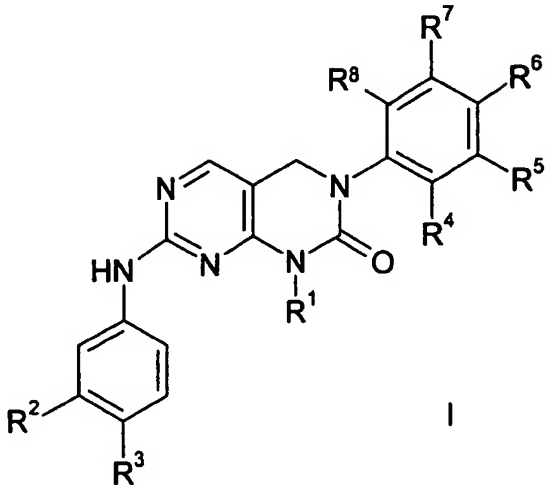
Attorney Docket # [ ] Search

Bar Code # [ ] Search

This listing of the claims will replace all prior versions and listings of the claims in this application.

In the Claims:

1. (Currently amended) A compound of formula



I

wherein

R^1 is selected from the group consisting of

-H,

$-(CH_2)_n$-heterocycle,

-lower alkyl substituted by up to three groups selected from $-OR^9$, $-COR^{10}$, $-CO_2R^{10}$, $-CONR^{10}R^{11}$, $-SO_2NR^{10}R^{11}$, SO_2R^{10} or -CN;

-cycloalkyl,

-alkenyl, and

-alkynyl,

where n is 0, 1, 2, or 3, and the heterocycle, ~~alkyl,~~ cycloalkyl, alkenyl, and alkynyl groups are each independently, optionally substituted by up to 3 groups selected from

-OR^9,
-COR^{10},
-CO_2R^{10},
-$CONR^{10}R^{11}$,
-$SO_2NR^{10}R^{11}$,
-SO_2R^{10}, and
-CN;

R^2 and R^3 are independently selected from the group consisting of
-H,
-OR^9,
-halogen,
-COR^{10},
-CO_2R^{10},
-$(CH_2)_n$-heterocycle,
-alkyl,
-cycloalkyl,
-alkenyl, and
-alkynyl,
where n is 0, 1, 2, or 3, and the heterocycle, alkyl, cycloalkyl, alkenyl, and alkynyl groups are each independently, optionally substituted by up to 3 groups selected from

-OR^9,
-halogen,
-COR^{10}, and
-CO_2R^{10};

R^4, R^5, R^6, R^7 and R^8 are each independently selected from the group consisting of
-H,
-lower alkyl that optionally may be substituted by hydroxy or alkoxy,

-OR^{12},

-halogen,

-COR^{13}, and

-CO_2R^{13};

R^9 is selected from the group consisting of

-H,

-COR^{10},

-lower alkyl that optionally may be substituted by hydroxy or alkoxy,

-cycloalkyl that optionally may be substituted by hydroxy, alkoxy, and lower alkyl, and

-heterocycle that optionally may be substituted by hydroxy, alkoxy or lower alkyl;

R^{10} and R^{11} are each independently selected from the group consisting of

-H,

-lower alkyl that optionally may be substituted by hydroxy or alkoxy,

-cycloalkyl that optionally may be substituted by hydroxy, alkoxy or lower alkyl, and

-heterocycle that optionally may be substituted by hydroxy, alkoxy or lower alkyl;

R^{12} is selected from the group consisting of -H, lower alkyl and -COR^{13}; and

R^{13} is selected from the group consisting of -H and lower alkyl;

or the pharmaceutically acceptable salts thereof.

2. (Currently amended) The compound of claim 1 wherein R^1 is selected from cycloalkyl; cycloaklyl substituted by –OH; heterocycle; ~~lower alkyl;~~ and lower alkyl substituted by -OH.

3. (Original) The compound of claim 1 wherein R^2 is -H or -OCH_3.

4. (Original) The compound of claim 1 wherein R^3 is -H, F, or -OCH_3.

5. (Original) The compound of claim 1 wherein R^2 and R^3 are both -H.

6. (Original) The compound of claim 1 wherein R^4, R^5 and R^7 are -H.

7. (Original) The compound of claim 1 wherein R^6 is halogen or OR^{12}.

8. (Original) The compound of claim 7 wherein R^6 is –OCH_3.

9. (Original) The compound of claim 1 wherein R^8 is -H or -F.

10. (Original) The compound of claim 1 wherein R^9 is -H, lower alkyl, or lower alkyl substituted by hydroxy.

11. (Original) The compound of claim 10 wherein R^9 is -H.

12. (Original) The compound of claim 1 wherein R^{10} is -H, lower alkyl, or lower alkyl substituted by hydroxy.

13. (Original) The compound of claim 12 wherein R^{10} is -H.

14. (Original) The compound of claim 1 wherein R^{11} is -H, lower alkyl, or lower alkyl substituted by hydroxy.

15. (Original) The compound of claim 14 wherein R^{11} is -H.

16. (Original) The compound of claim 1 wherein R^{12} is -H or lower alkyl.

17. (Original) The compound of claim 16 wherein R^{12} is -H.

18. (Original) The compound of claim 1 wherein R^{13} is -H or lower alkyl.

19. (Original) The compound of claim 18 wherein R^{13} is -H.

20. (Currently amended) A compound selected from the group:

1-Cyclohexyl-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 1e)~~,

3-(4-Methoxy-phenyl)-7-phenylamino-1-piperidin-4-yl-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 2b)~~,

1-(*trans*-4-Hydroxy-cyclohexyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 3c)~~,

3-(4-Methoxy-phenyl)-7-phenylamino-1-piperidin-3-yl-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 4b)~~,

1-Cyclopentyl-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 5)~~,

1-(1,1-Dioxo-tetrahydro-1l 6-thiophen-3-yl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 6)~~,

3-[3-(4-Methoxy-phenyl)-2-oxo-7-phenylamino-3,4-dihydro-2H-pyrimido[4,5-d]pyrimidin-1-yl]-piperidine-1-carbaldehyde~~(Example 7)~~,

3-(4-Methoxy-phenyl)-7-phenylamino-1-(tetrahydro-pyran-4-yl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 8)~~,

(±)-1-(*trans*-3-Hydroxy-cyclopentyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 9d)~~, and

(±)-*cis*-1-(3-Hydroxy-cyclopentyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 10e)~~.

21. (Currently amended) A compound selected from the group:

(*R*)-3-(4-Methoxy-phenyl)-7-phenylamino-1-(tetrahydro-furan-3-yl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one (Example 11b) (*R*)-3-(4-Methoxy-phenyl)-7-phenylamino-1-pyrrolidin-3-yl-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one~~(Example 12)~~,

(±)-7-(4-Fluoro-phenylamino)-1-(*trans*-3-hydroxy-cyclopentyl)-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 13c)~~,

(±)-3-(2-Fluoro-4-methoxy-phenyl)-1-(*trans*-3-hydroxy-cyclopentyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 14d)~~,

(*S*)-(+)-1-(2-Hydroxy-1-methyl-ethyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 15d)~~,

(*S*)-(+)-7-(4-Fluoro-phenylamino)-1-(2-hydroxy-1-methyl-ethyl)-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 16)~~,

3-(2-Fluoro-4-methoxy-phenyl)-1-(*trans*-4-hydroxy-cyclohexyl)-7-(4-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 17d)~~,

3-(2-Fluoro-4-methoxy-phenyl)-1-(*trans*-4-hydroxy-cyclohexyl)-7-(3,4-dimethoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 18)~~,

3-(4-Methoxy-phenyl)-1-(*trans*-4-hydroxy-cyclohexyl)-7-(3,4-dimethoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 19c)~~,

3-(4-Methoxy-phenyl)-1-(*trans*-4-hydroxy-cyclohexyl)-7-(4-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 20b)~~, and

(*S*)-(+)-3-(2-Fluoro-4-methoxy-phenyl)-7-(4-fluoro-phenylamino)-1-(2-hydroxy-1-methyl-ethyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 21b)~~.

22. (Currently amended) A compound selected from the group:

(*S*)-(+)-3-(2-Fluoro-4-methoxy-phenyl)-1-(2-hydroxy-1-methyl-ethyl)-7-(4-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 22)~~,

(*R*)-(-)-1-(2-Hydroxy-1-methyl-ethyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 23d)~~,

3-(4-Methoxy-phenyl)-1-methyl -7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidine-2-one ~~(Example 24b)~~,

1-(2-methoxy-ethoxymethyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 25)~~,

3-[-3-(4-Methoxy-phenyl)-2-oxo-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-1-yl]-propionitrile ~~(Example 26)~~,

(+)-(1*R*,3*R*)-1-(3-Hydroxy-cyclopentyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 27f)~~,

(*R*)-1-(2-Hydroxy-propyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 28d)~~,

(-)-(1*S*,3*S*)-1-(3-Hydroxy-cyclopentyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 29h)~~,

3-[-3-(4-Methoxy-phenyl)-2-oxo-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-1-yl]-propionamide ~~(Example 30)~~, and

(*S*)-(+)-1-(2-Hydroxy-propyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 31d)~~.

23. (Currently amended) A compound selected from the group:

1-(*cis*-3,5-Dihydroxy-cyclohexyl)-3-(2-fluoro-4-methoxy-phenyl)-7-(4-methoxyphenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 32f)~~,

1-(*cis*-3,5-Dihydroxy-cyclohexyl)-3-(4-methoxy-phenyl)-7-(4-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 33c)~~,

1-(*cis*-3,5-Dihydroxy-cyclohexyl)-3-(4-methoxy-phenyl)-7-(4-fluoro-3-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 34f)~~,

1-(*cis*-3,5-Dihydroxy-cyclohexyl)-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 35b)~~,

1-(*cis*-3,5-Dihydroxy-cyclohexyl)-3-(2-fluoro-4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 36b)~~,

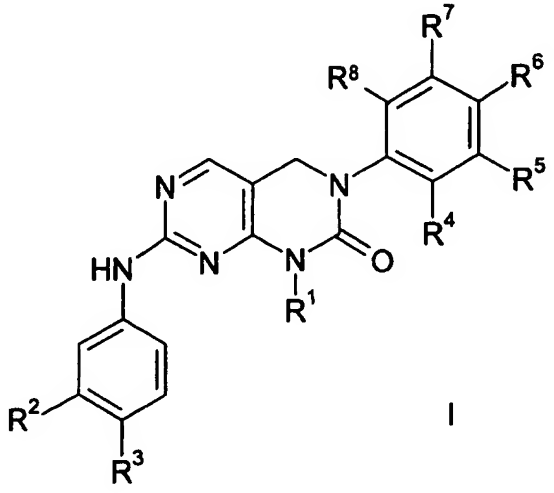
1-(*cis*-3,5-Dihydroxy-cyclohexyl)-3-(2-fluoro-4-methoxy-phenyl)-7-(4-fluoro-3-methoxyphenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 37b)~~,

(*R*)-3-(4-Ethyl-phenyl)-7-(4-fluoro-phenylamino)-1-(2-hydroxy-1-methyl-ethyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 38g)~~,

(±)-3-(4-Ethyl-phenyl)-7-(4-fluoro-phenylamino)-1-(*trans*-3-hydroxy-cyclopentyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 39d)~~, and

1-Cyclopropylmethyl-3-(4-methoxy-phenyl)- 7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidine-2-one ~~(Example 40)~~.

24. (Original) A compound of formula



I

wherein

R^1 is selected from

-H,

-lower alkyl substituted by –OH, COR^{10}, -CN or $-CONH_2$,

$-(CH_2)_n$-heterocycle,

$-(CH_2)_n$-heterocycle substituted by $-COR^{10}$, $-CO_2R^{10}$ or $(=O)_2$,

cycloalkyl,

cycloalkyl substituted by –OH;

R^2 is H or $-OCH_3$;

R^3 is H, F or $-OCH_3$;

R^4 , R^5 and R^7 are H;

R^6 is $-OCH_3$ or lower alkyl;

R^8 is H or F H;

R^{10} is lower alkyl substituted by alkoxy; and

n is 0 or 1.

25. (Original) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and pharmaceutically acceptable carrier or excipient.

26. (Currently amended) A method for treating breast, lung, colon or prostate cancer comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of claim 1.

27. (Currently amended) A method of controlling breast, lung, colon or prostate cancer comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of claim 1.

28. Cancelled.

29. Cancelled.

30. (Currently amended) A compound selected from the group:

4-[3-(4-Methoxy-phenyl)-2-oxo-7-phenylamino-3,4-dihydro-2H-pyrimido[4,5-d]pyrimidin-1-yl]-piperidine-1-carboxylic acid *tert*-butyl ester ~~(Example 2a)~~,

1-[*trans*-4-(*tert*-Butyl-dimethyl-silanyloxy)-cyclohexyl]-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 3b)~~,

3-[3-(4-Methoxy-phenyl)-2-oxo-7-phenylamino-3,4-dihydro-2H-pyrimido[4,5-d]pyrimidin-1-yl]-piperidine-1-carboxylic acid *tert*-butyl ester ~~(Example 4a)~~,

(±)-3-*cis*-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 10d)~~,

(*R*)-2-Methylsulfanyl-4-(tetrahydro-furan-3-ylamino)-pyrimidine-5-carboxylic acid ethyl ester ~~(Example 11a)~~,

(±)-4-[*trans*-3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentylamino]-2-methylsulfanyl-pyrimidine-5-carbaldehyde ~~(Example 13a)~~,

(±)-1-[*trans*-3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-3-(4-methoxy-phenyl)-7-methylsulfanyl-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 13b)~~,

(±)-[3-*trans*-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-{5-[(2-fluoro-4-methoxy-phenylamino)-methyl]-2-methylsulfanyl-pyrimidin-4-yl}-amine ~~(Example 14b)~~,

(±)-1-[*trans*-3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-3-(4-methoxy-phenyl)-7-methylsulfanyl-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 14c)~~,

(*S*)-1-[2-(*tert*-Butyl-diphenyl-silanyloxy)-1-methyl-ethyl]-7-chloro-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 15c)~~,

1-[*trans*-4-(*tert*-Butyl-dimethyl-silanyloxy)-cyclohexyl]-7-chloro-3-(2-fluoro-4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 17c)~~,

1-[*trans*-4-(*tert*-Butyl-dimethyl-silanyloxy)-cyclohexyl]-7-chloro-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 19a)~~,

1-[*trans*-4-(*tert*-Butyl-dimethyl-silanyloxy)-cyclohexyl]-3-(4-methoxy-phenyl)-7-(3,4-dimethoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 19b)~~, and

1-[*trans*-4-(*tert*-Butyl-dimethyl-silanyloxy)-cyclohexyl]-3-(4-methoxy-phenyl)-7-(4-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 20a)~~.

31. (Currently amended) A compound selected from the group:

(*S*)-1-[2-(*tert*-Butyl-diphenyl-silanyloxy)-1-methyl-ethyl]-7-chloro-3-(2-fluoro-4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 21a)~~,

(*R*)-1-[2-(*tert*-Butyl-diphenyl-silanyloxy)-1-methyl-ethyl]-7-chloro-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 23c)~~,

3-(4-Methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidine-2-one ~~(Example 24a)~~,

(+)-(1*R*,3*R*)-4-[3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentylamino]-2-methylsulfanyl-pyrimidine-5-carboxylic acid ethyl ester ~~(Example 27d)~~,

(-)-(1*R*,3*R*)-1-[3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 27e)~~,

(*R*)-1-[2-(*tert*-Butyl-diphenyl-silanyloxy)-propyl]-7-chloro-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 28c)~~,

(-)-(1*S*,3*S*)-4-[3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentylamino]-2-methylsulfanyl-pyrimidine-5-carboxylic acid ethyl ester ~~(Example 29d)~~,

(-)-(1*S*,3*S*)-4-[3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentylamino]-2-methylsulfanyl-pyrimidine-5-carbaldehyde ~~(Example 29e)~~,

(-)-(1*S*,3*S*)-1-[3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-3-(4-methoxy-phenyl)-7-methylsulfanyl-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 29f)~~,

(-)-(1*S*,3*S*)-1-[3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 29g)~~,

(*S*)-1-[2-(*tert*-Butyl-diphenyl-silanyloxy)-propyl]-7-chloro-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 31c)~~,

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-7-chloro-3-(2-fluoro-4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 32d)~~,

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-3-(2-fluoro-4-methoxy-phenyl)-7-(4-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 32e)~~, and

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-7-chloro-3-(4-methoxy-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 33a)~~.

32. (Currently amended) A compound selected from the group:

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-3-(4-methoxy-phenyl)-7-(4-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 33b)~~,

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-3-(4-methoxy-phenyl)-7-(4-fluoro-3-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 34e)~~,

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-3-(4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 35a)~~,

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-3-(2-fluoro-4-methoxy-phenyl)-7-phenylamino-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 36a)~~,

1-[*cis*-3,5-Bis-(*tert*-butyl-diphenyl-silanyloxy)-cyclohexyl]-3-(2-fluoro-4-methoxy-phenyl)-7-(4-fluoro-3-methoxy-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 37a)~~,

(2,4-Dichloro-pyrimidin-5-ylmethyl)-(4-ethyl-phenyl)-amine ~~(Example 38c)~~,

(*R*)-3-[2-(*tert*-Butyl-dimethyl-silanyloxy)-1-methyl-ethyl]-1-(2,4-dichloro-pyrimidin-5-ylmethyl)-1-(4-ethyl-phenyl)-urea ~~(Example 38d)~~,

(*R*)-1-[2-(*tert*-Butyl-dimethyl-silanyloxy)-1-methyl-ethyl]-7-chloro-3-(4-ethyl-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 38e)~~,

(R)-1-[2-(*tert*-Butyl-dimethyl-silanyloxy)-1-methyl-ethyl]-3-(4-ethyl-phenyl)-7-(4-fluoro-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 38f)~~,

(±)-[*trans*-3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-{2-chloro-5-[(4-ethyl-phenylamino)-methyl]-pyrimidin-4-yl}-amine ~~(Example 39a)~~,

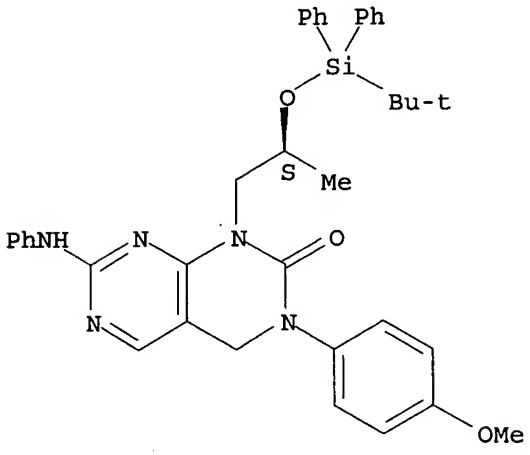
(±)-1-[*trans*-3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-7-chloro-3-(4-ethyl-phenyl)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 39b)~~, and

(±)-1-[*trans*-3-(*tert*-Butyl-dimethyl-silanyloxy)-cyclopentyl]-3-(4-ethyl-phenyl)-7-(4-fluoro-phenylamino)-3,4-dihydro-1H-pyrimido[4,5-d]pyrimidin-2-one ~~(Example 39c)~~.

=> 10/817,697 compounds

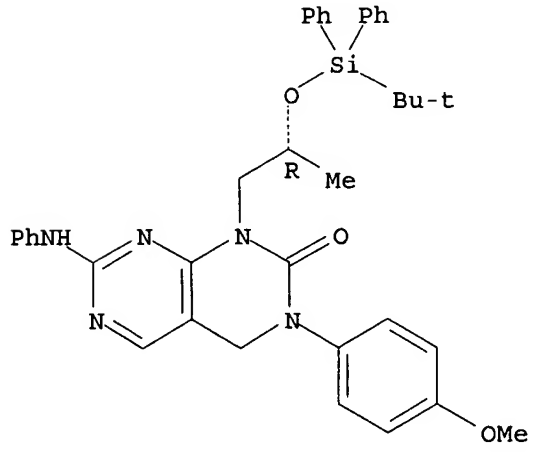
L8 ANSWER 1 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



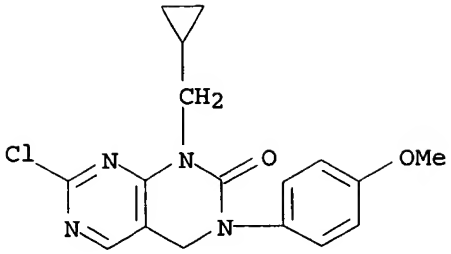
L8 ANSWER 2 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.

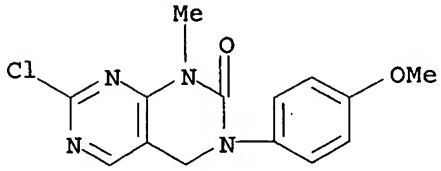


L8 ANSWER 3 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Thomas McKenzie

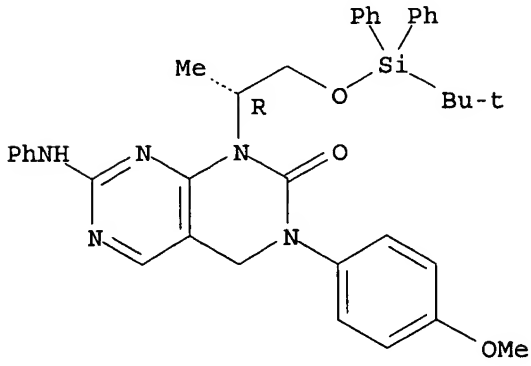


L8 ANSWER 4 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



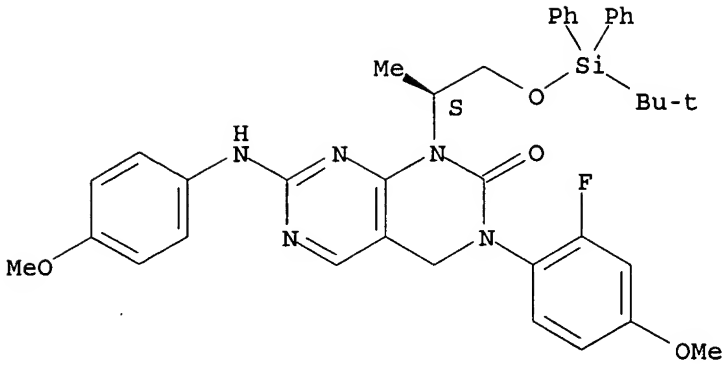
L8 ANSWER 5 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



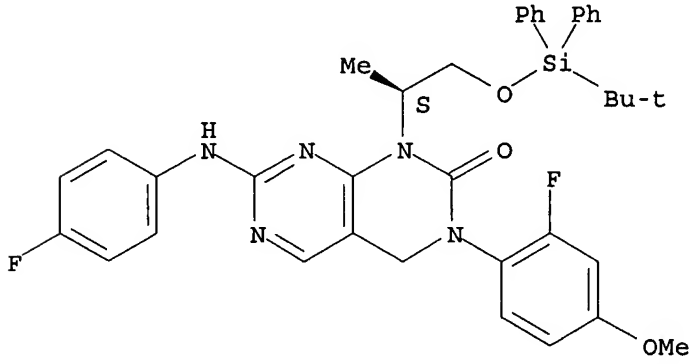
L8 ANSWER 6 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



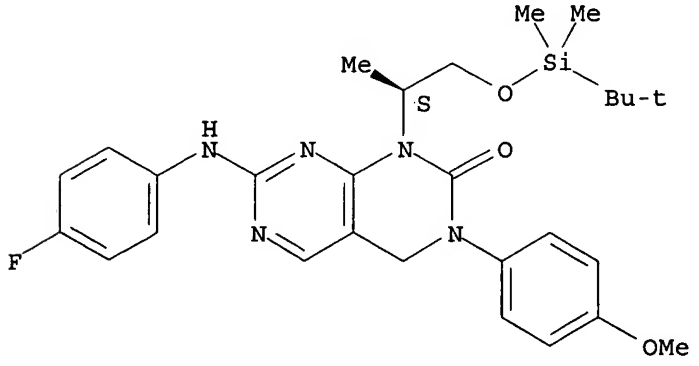
L8 ANSWER 7 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



L8 ANSWER 8 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

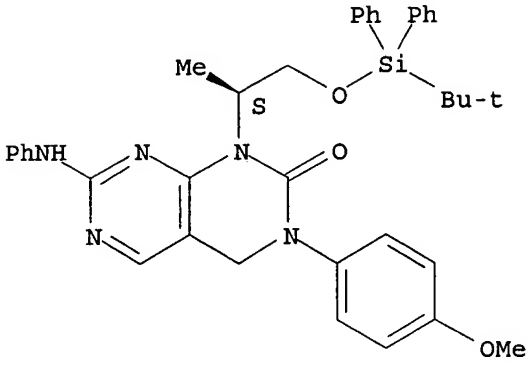
Absolute stereochemistry.



Thomas McKenzie

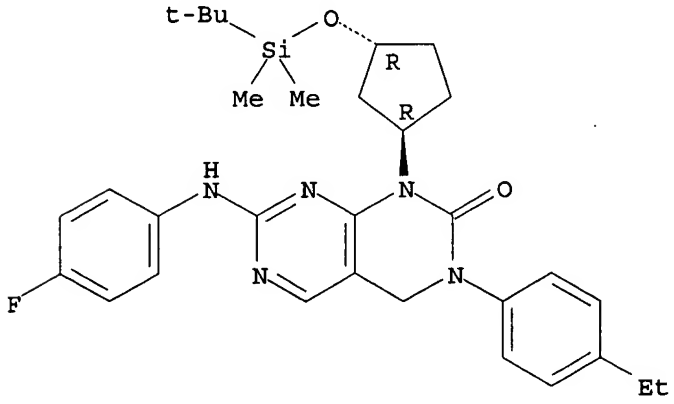
L8 ANSWER 9 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



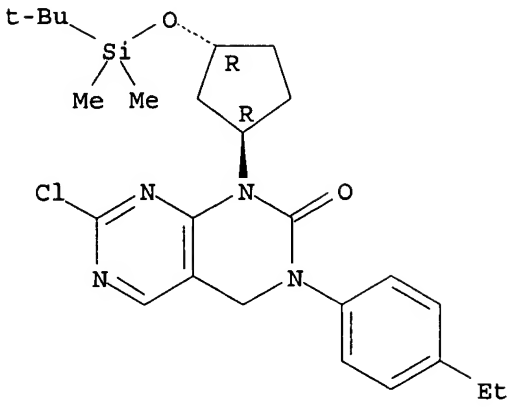
L8 ANSWER 10 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



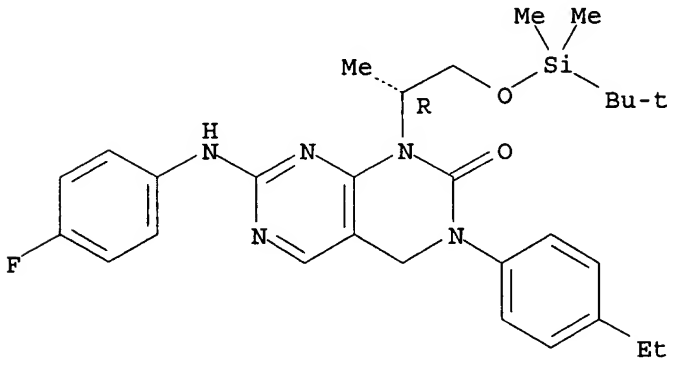
L8 ANSWER 11 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



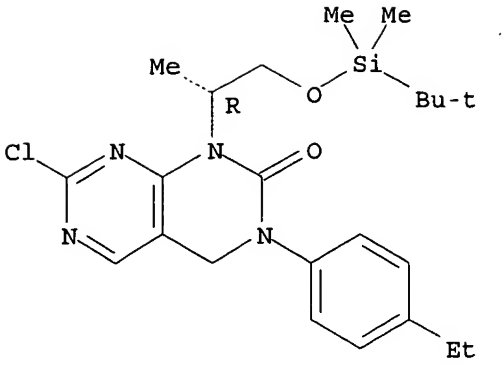
L8 ANSWER 12 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



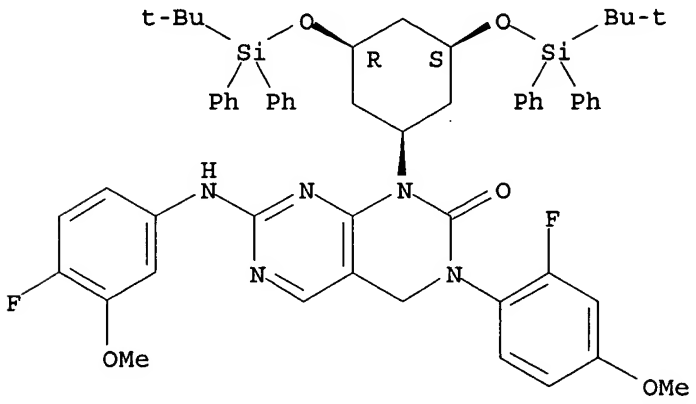
L8 ANSWER 13 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



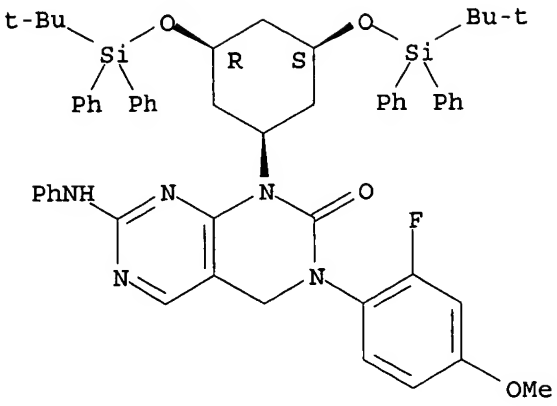
L8 ANSWER 14 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



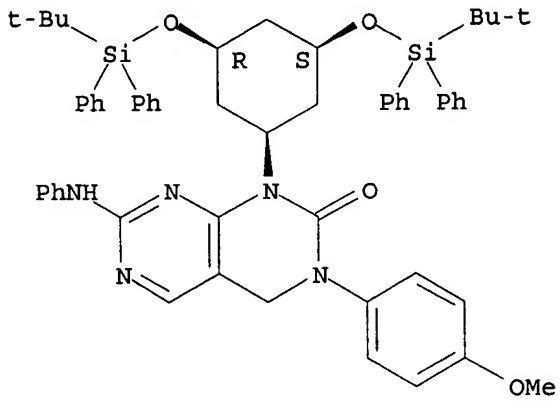
L8 ANSWER 15 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



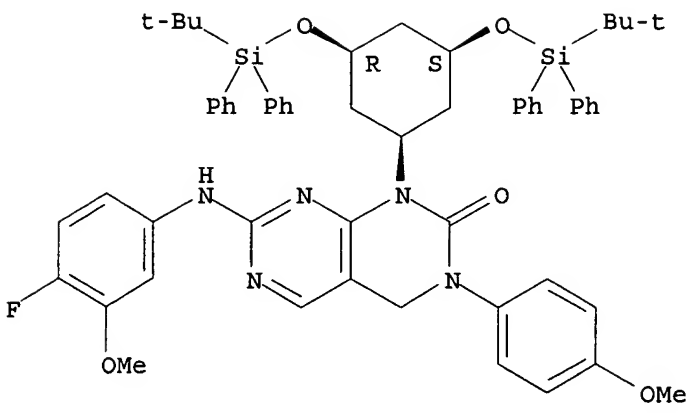
L8 ANSWER 16 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



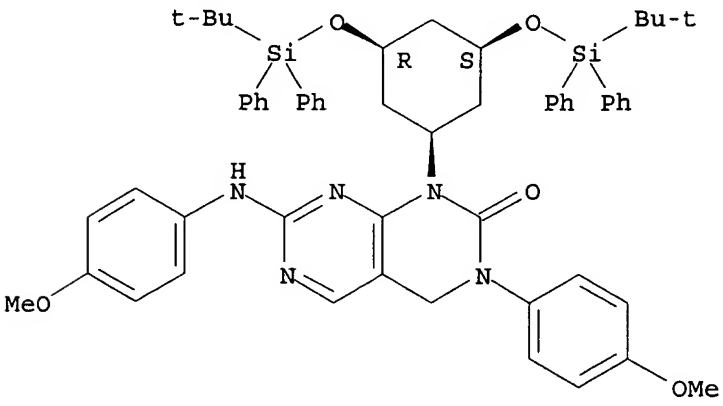
L8 ANSWER 17 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



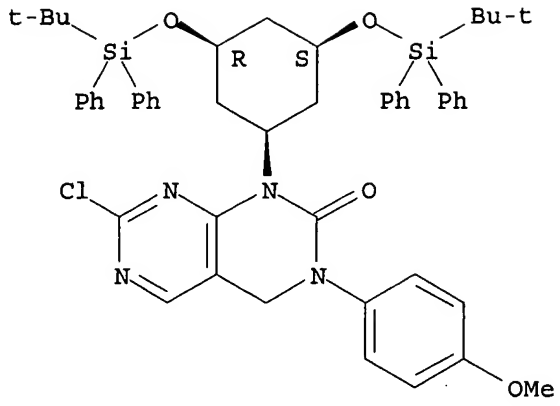
L8 ANSWER 18 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



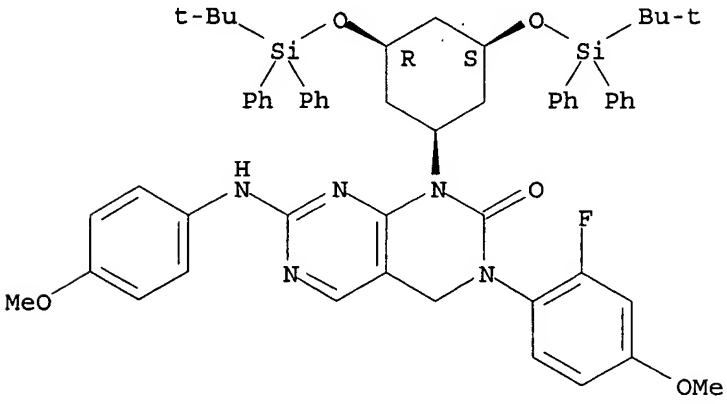
L8 ANSWER 19 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



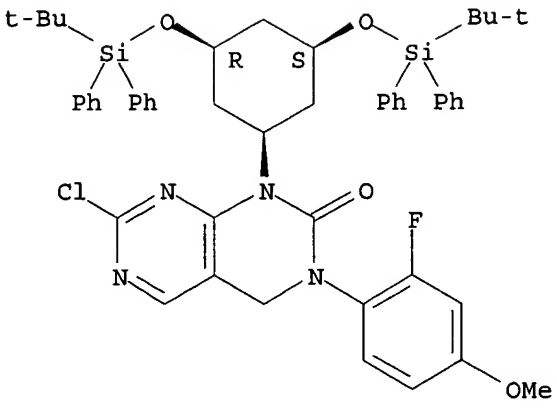
L8 ANSWER 20 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



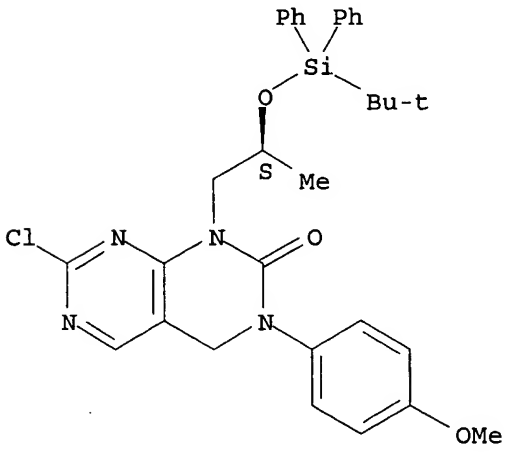
L8 ANSWER 21 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



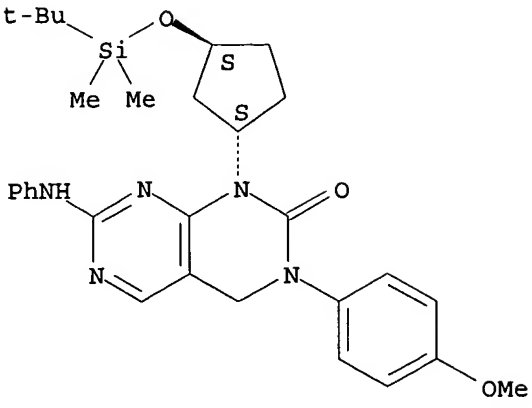
L8 ANSWER 22 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



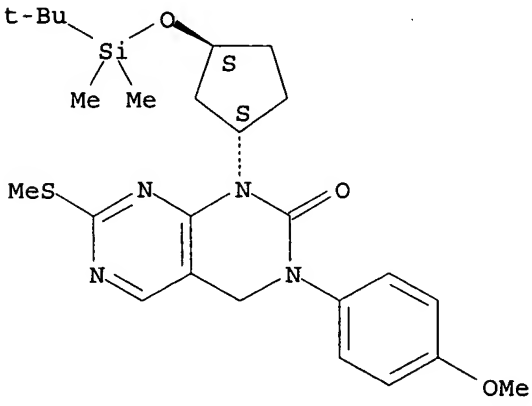
L8 ANSWER 23 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (-).



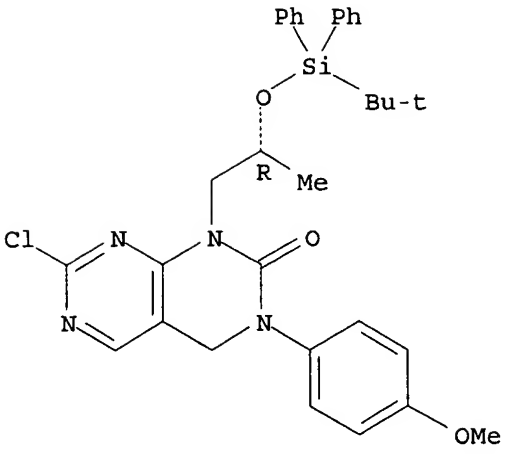
L8 ANSWER 24 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (-).



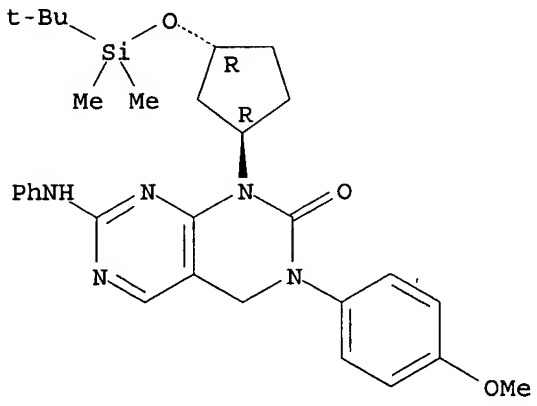
L8 ANSWER 25 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



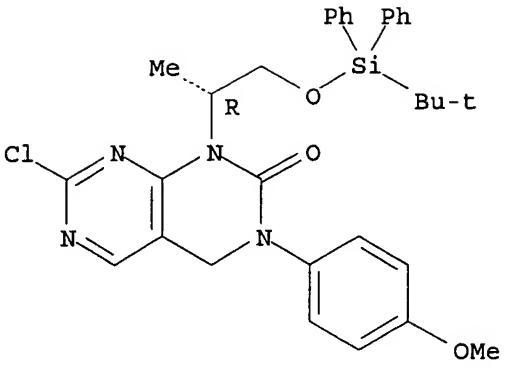
L8 ANSWER 26 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (-).



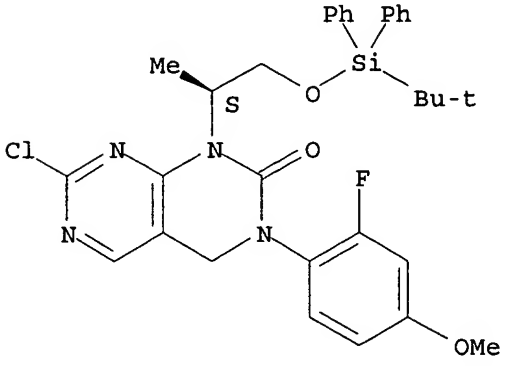
L8 ANSWER 27 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



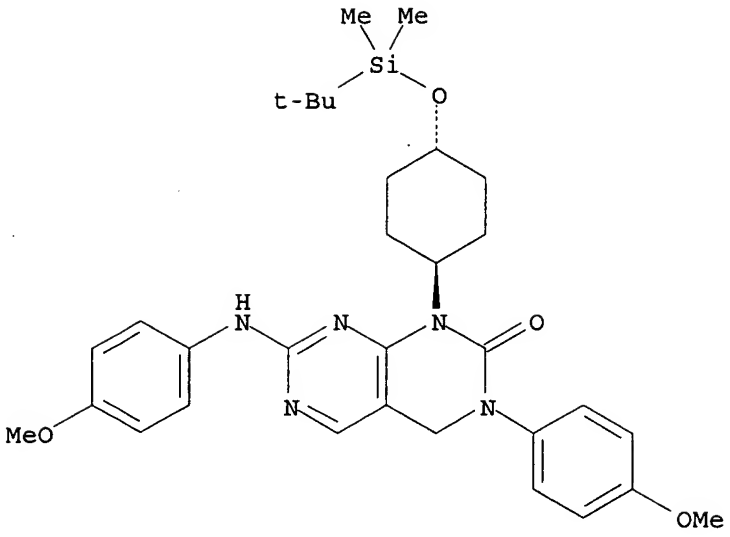
L8 ANSWER 28 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



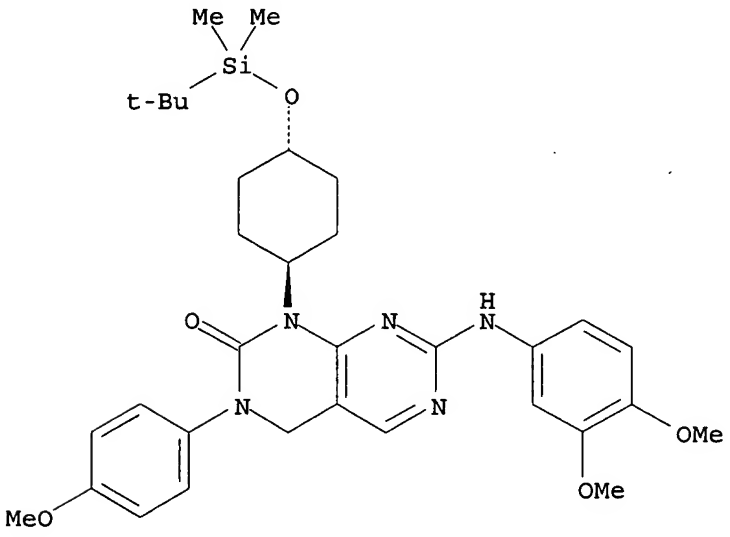
L8 ANSWER 29 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



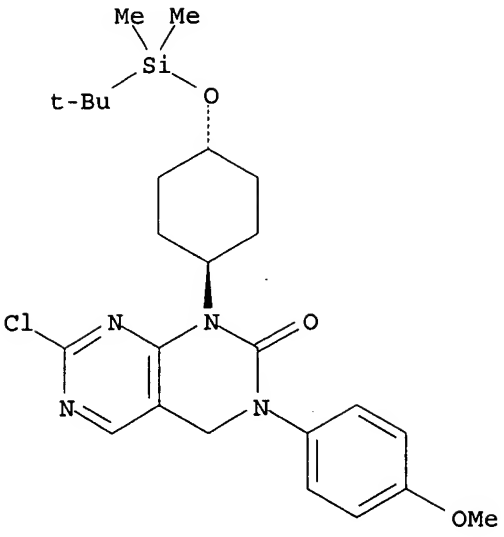
L8 ANSWER 30 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



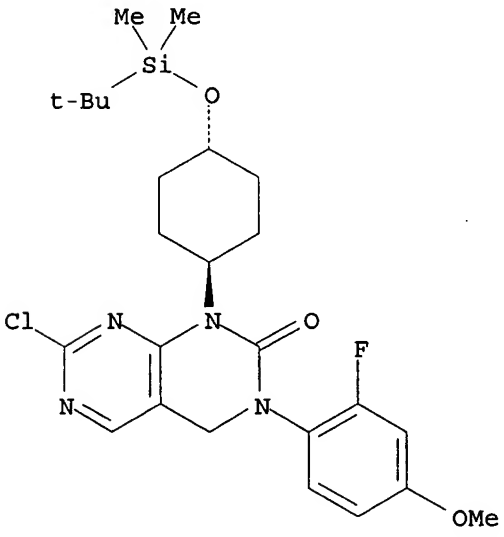
L8 ANSWER 31 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



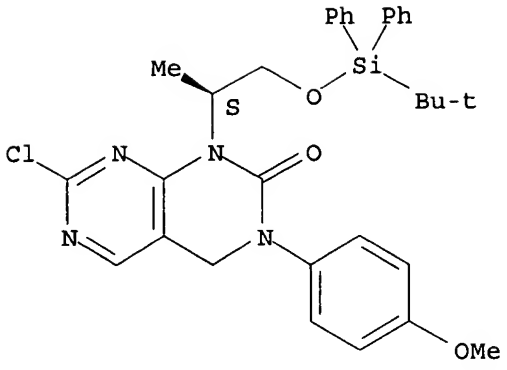
L8 ANSWER 32 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



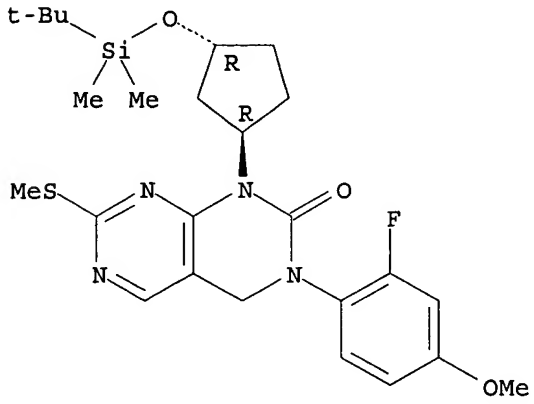
L8 ANSWER 33 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



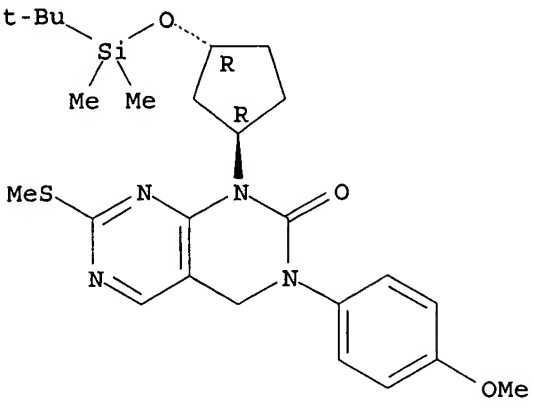
L8 ANSWER 34 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



L8 ANSWER 35 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

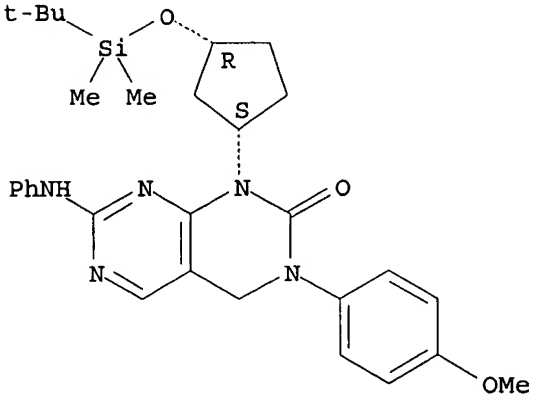
Relative stereochemistry.



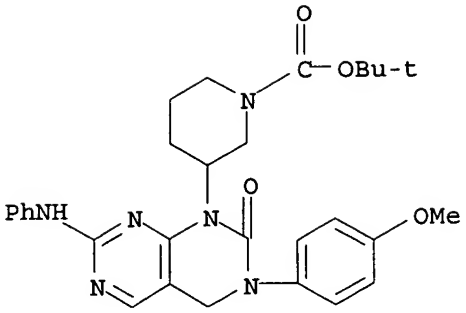
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 ANSWER 36 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.

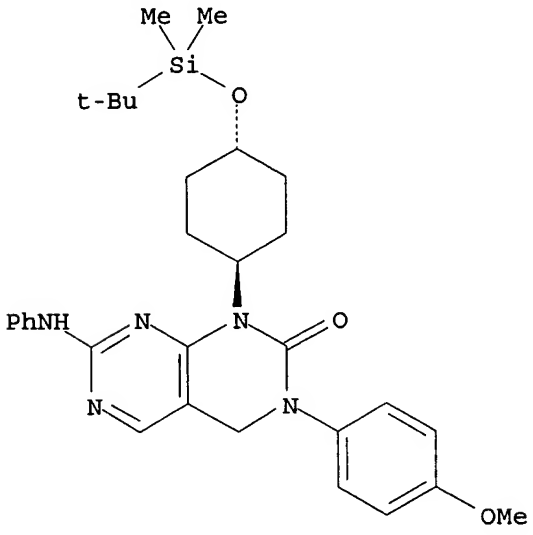


L8 ANSWER 37 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

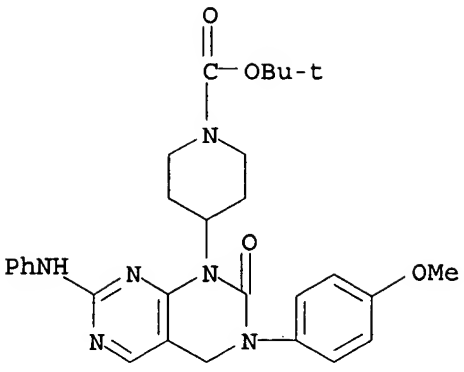


L8 ANSWER 38 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

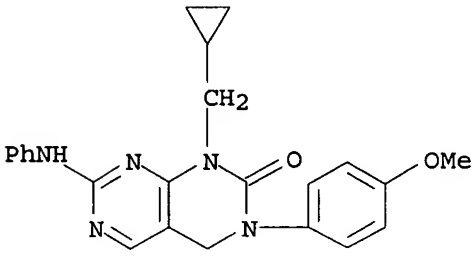
Relative stereochemistry.



L8 ANSWER 39 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

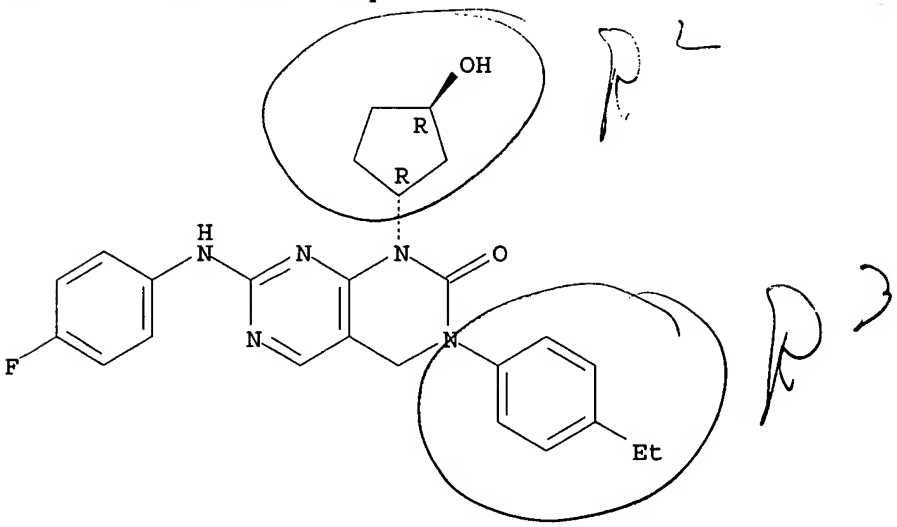


L8 ANSWER 40 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



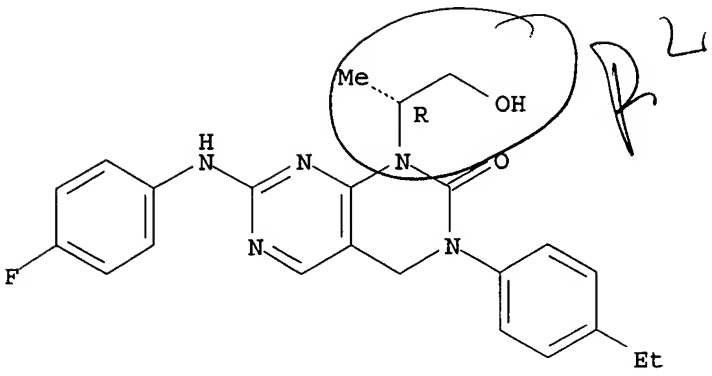
L8 ANSWER 41 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



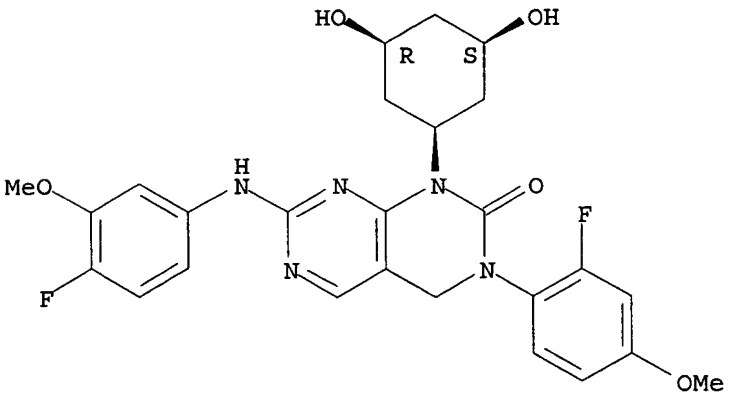
L8 ANSWER 42 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



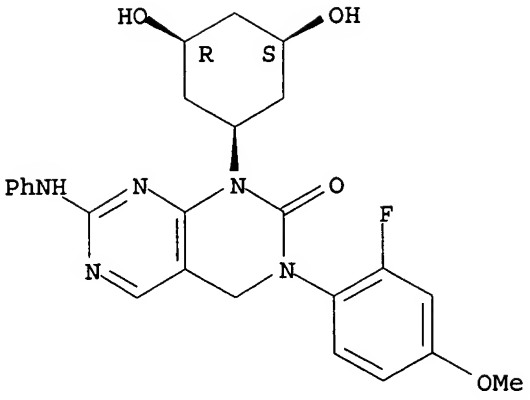
L8 ANSWER 43 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



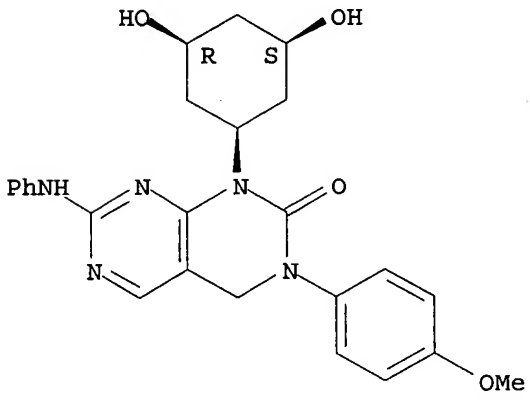
L8 ANSWER 44 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



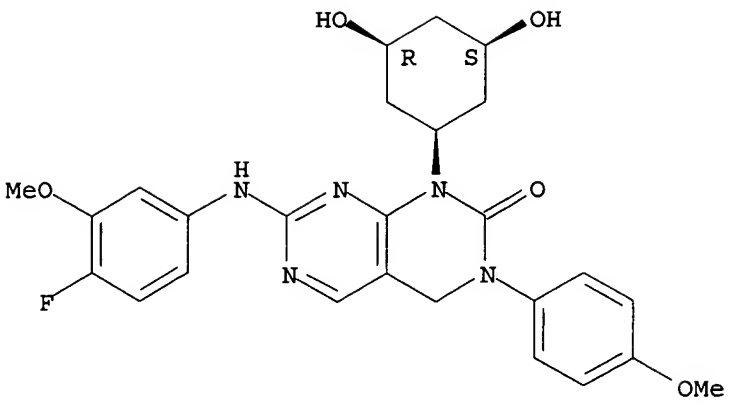
L8 ANSWER 45 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



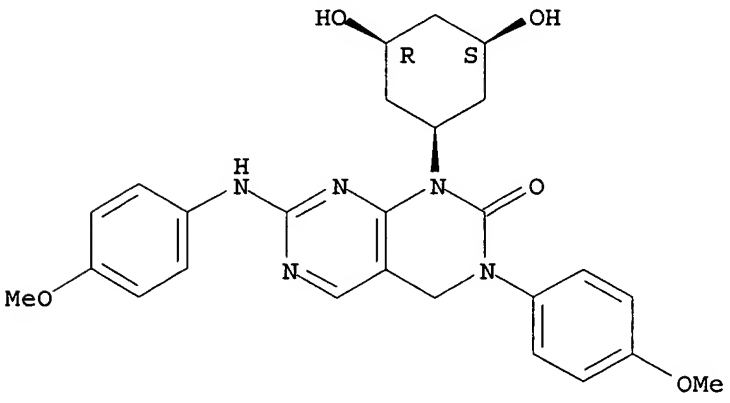
L8 ANSWER 46 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



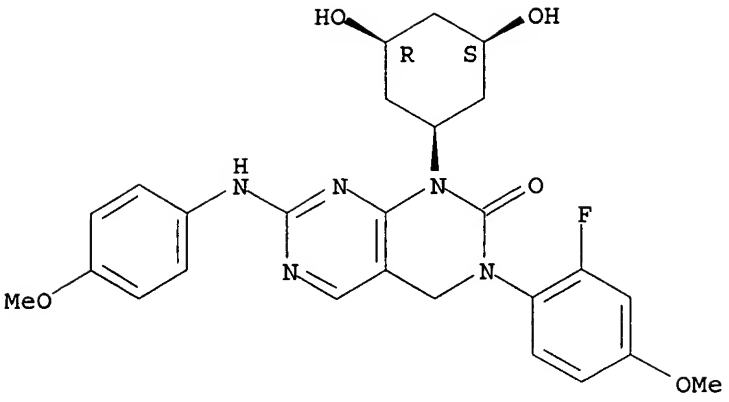
L8 ANSWER 47 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



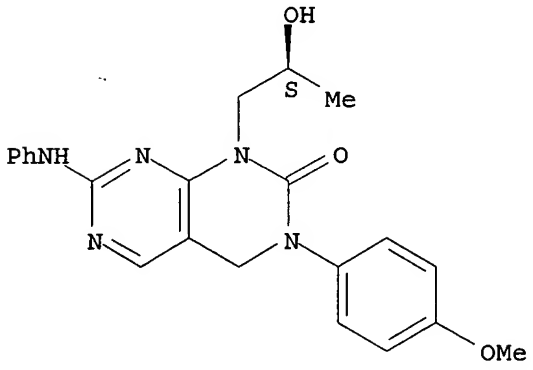
L8 ANSWER 48 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.

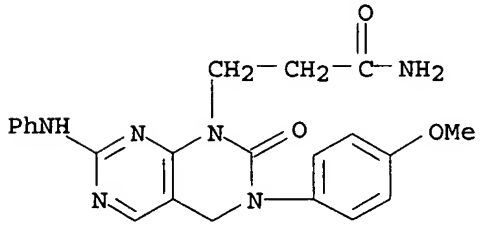


L8 ANSWER 49 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (+).

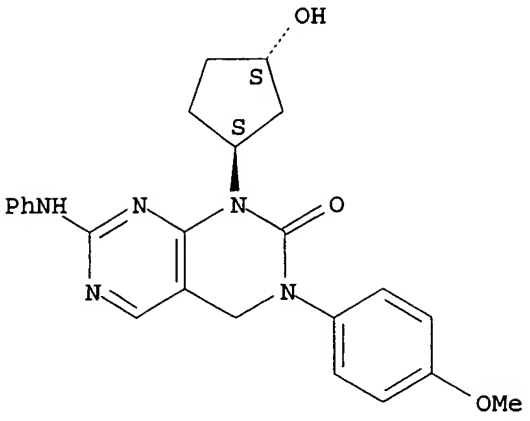


L8 ANSWER 50 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



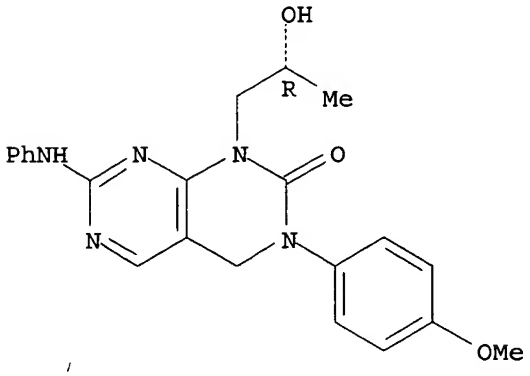
L8 ANSWER 51 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (-).



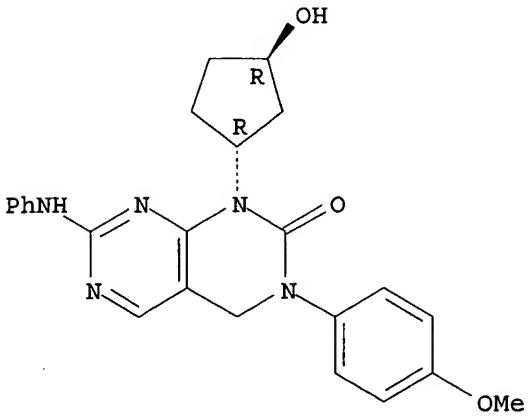
L8 ANSWER 52 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.

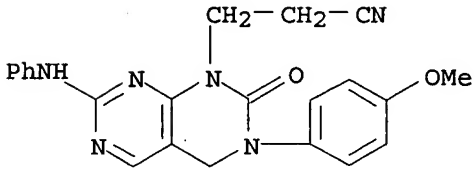


L8 ANSWER 53 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

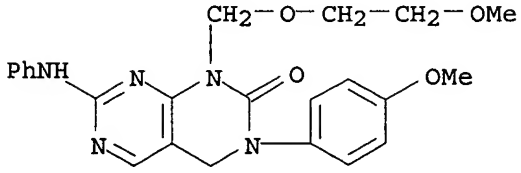
Absolute stereochemistry. Rotation (+).



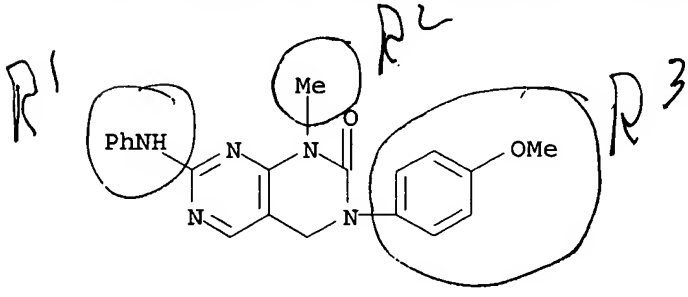
L8 ANSWER 54 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



L8 ANSWER 55 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



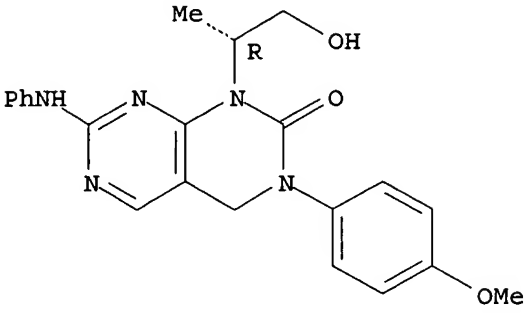
L8 ANSWER 56 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



Claim 1

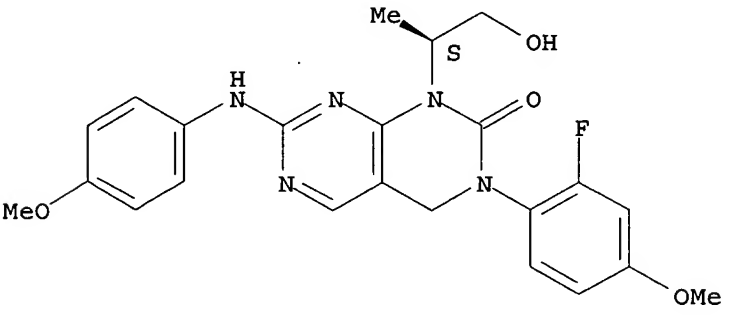
L8 ANSWER 57 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (-).



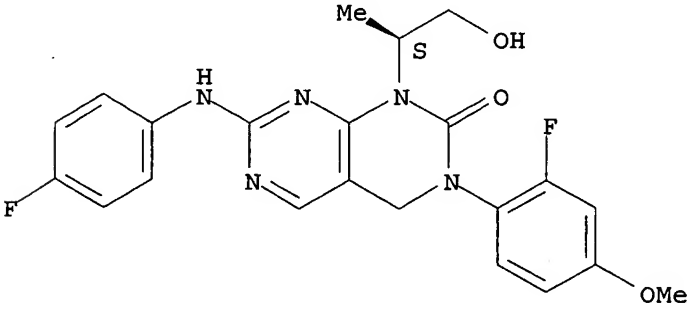
L8 ANSWER 58 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (+).



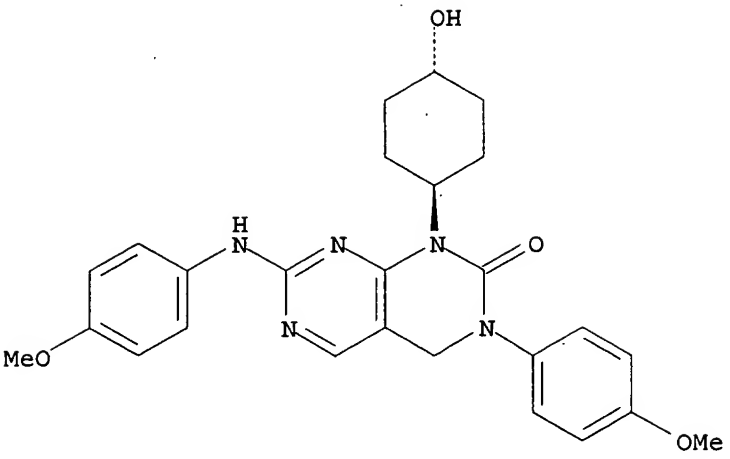
L8 ANSWER 59 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (+).



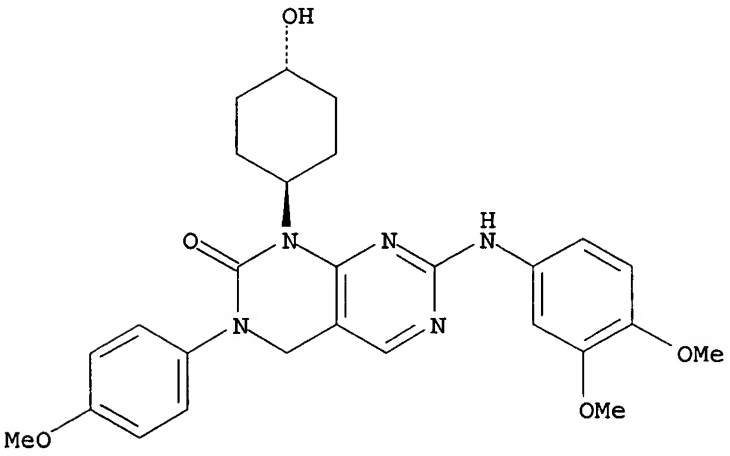
L8 ANSWER 60 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



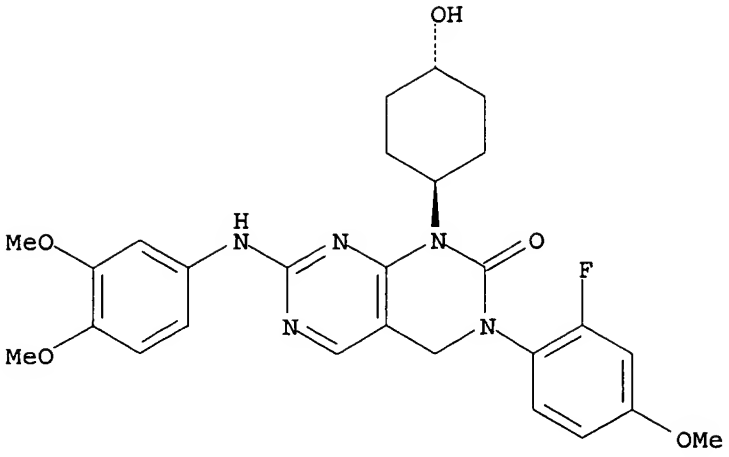
L8 ANSWER 61 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



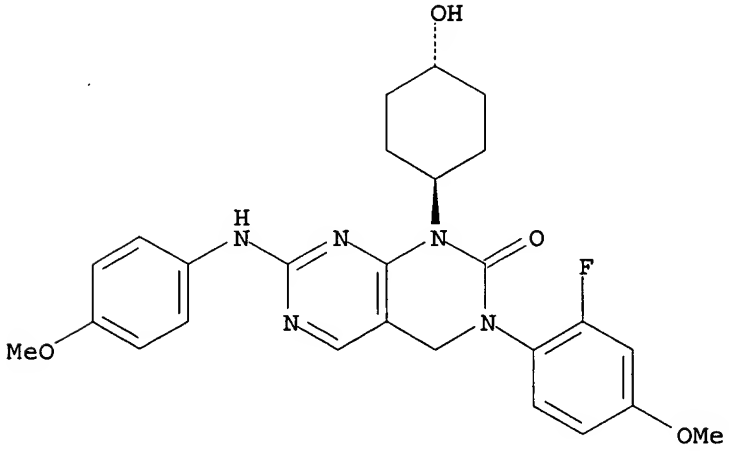
L8 ANSWER 62 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



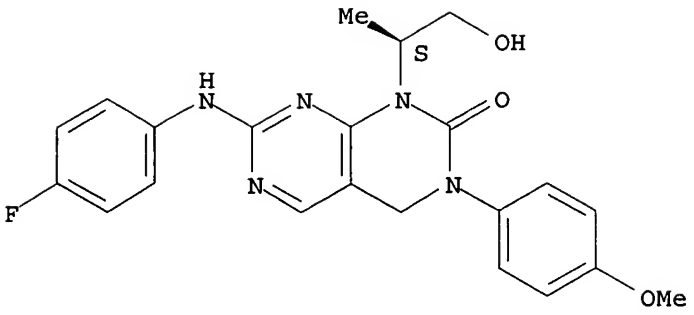
L8 ANSWER 63 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



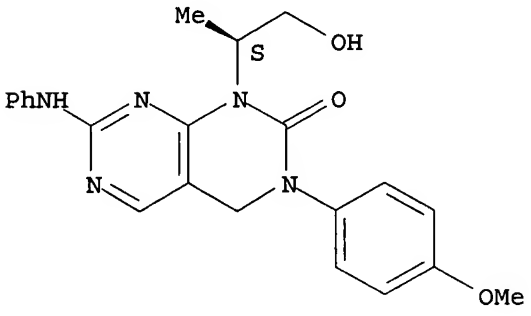
L8 ANSWER 64 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (+).



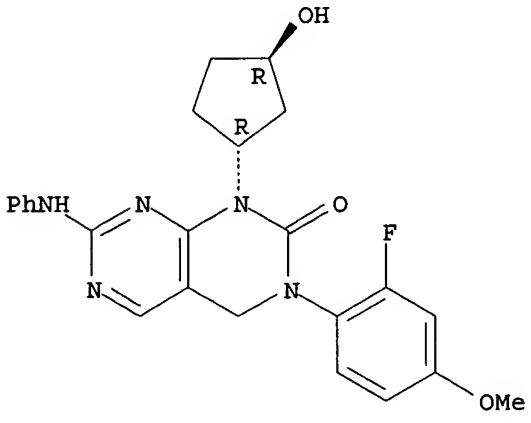
L8 ANSWER 65 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry. Rotation (+).



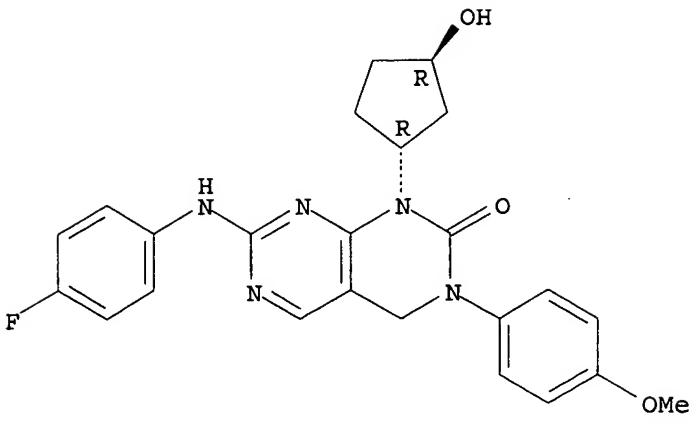
L8 ANSWER 66 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



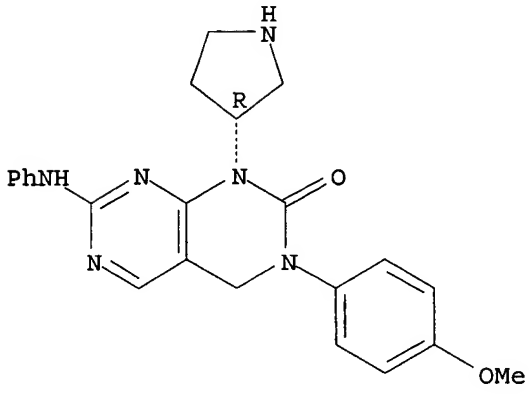
L8 ANSWER 67 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



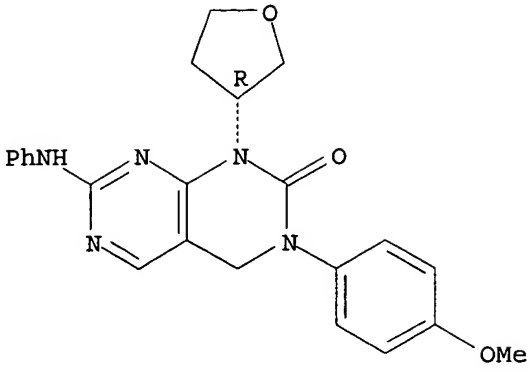
L8 ANSWER 68 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



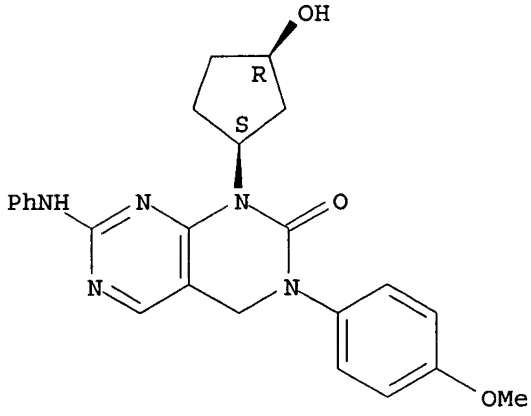
L8 ANSWER 69 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Absolute stereochemistry.



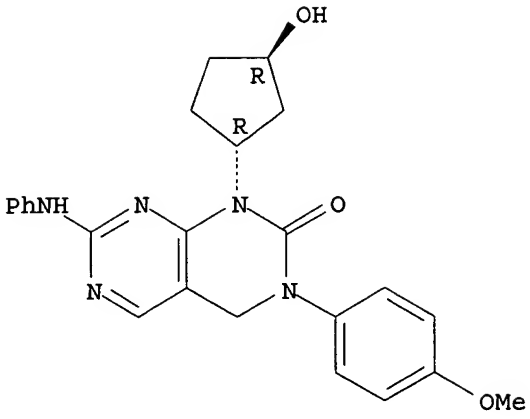
L8 ANSWER 70 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



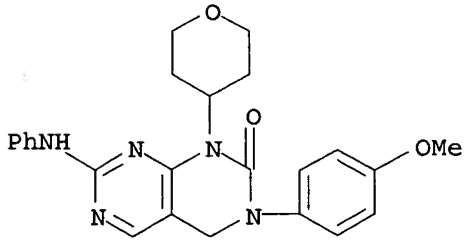
L8 ANSWER 71 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.

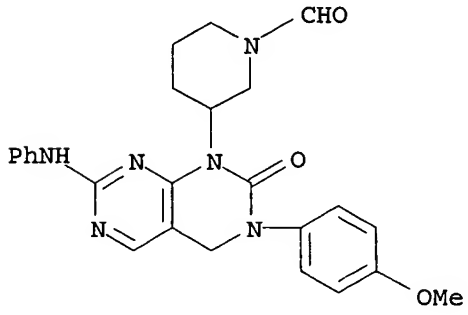


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

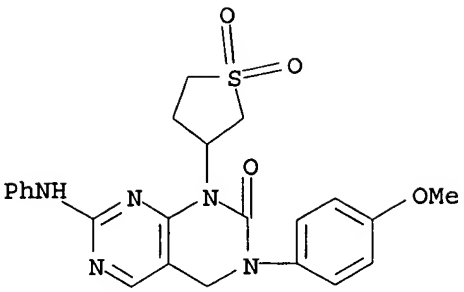
L8 ANSWER 72 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



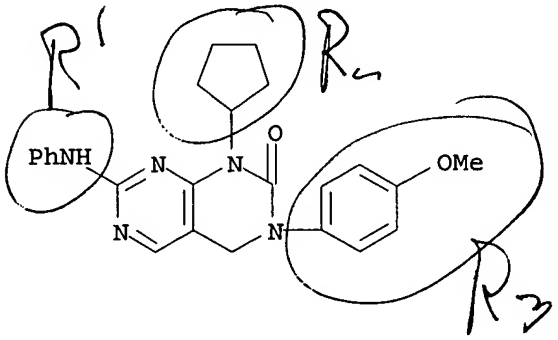
L8 ANSWER 73 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



L8 ANSWER 74 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

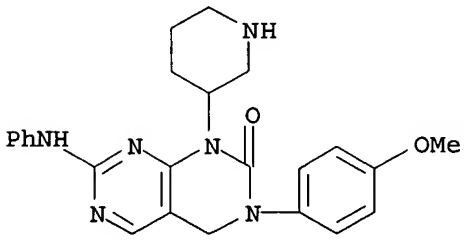


L8 ANSWER 75 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



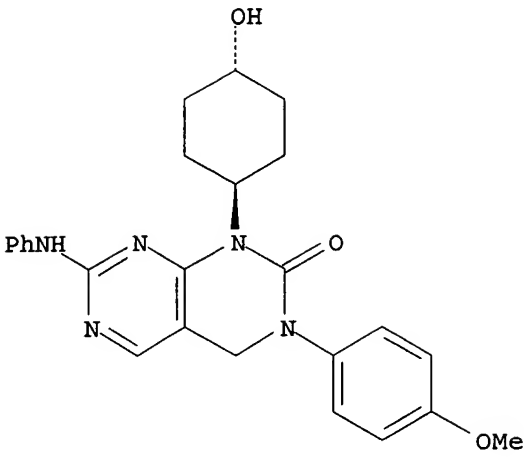
claims 1

L8 ANSWER 76 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

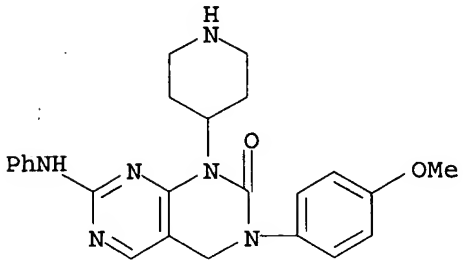


L8 ANSWER 77 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN

Relative stereochemistry.



L8 ANSWER 78 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN



L8 ANSWER 79 OF 79 REGISTRY COPYRIGHT 2006 ACS on STN